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FOREST FIRE RESEARCH Final Report - Phase 1

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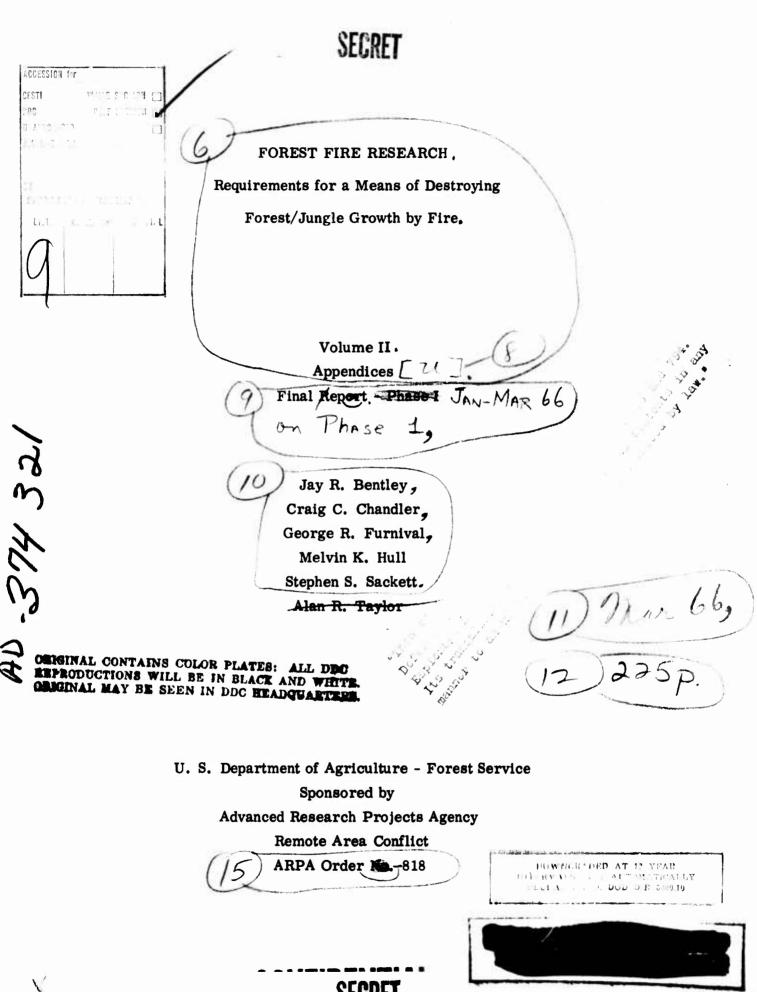
Volume 2

Requirements for a means of Destroying Forest/Jungle Growth by Fire

> **U.S. Department of Agriculture Forest Service**

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APPENDIX A

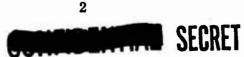
FUNDAMENTAL PROCESSES IN FOREST FIRE BEHAVIOR

IGNITION

When a piece of wood or other forest fuel is exposed to a source of heat, some of the heat is absorbed at the surface and conducted into the interior of the fuel. The ensuing rise in temperature of the fuel particle is accompanied by destructive distillation of its volatile constituents, both combustible and non-combustible. The ignition of these evolved gases by direct contact with the heat source is termed 'piloted' ignition; this is the only type of ignition of concern to Project EMOTE. The probability of piloted ignition depends on the chemical composition of the combustible volatiles and the extent of their mixture with oxygen and noncombustible volatiles (mostly water vapor with a little carbon dioxide). The four factors materially affecting piloted ignition of forest fuels are the rate of heat transfer produced by the heat source, and the dimensions, moisture content and thermal conductivity of the particle being heated.

Both the concentration and chemical composition of evolved gases depend upon the rate of heating of the fuel particle. This rate, in turn, depends not only on the characteristics of the particle itself, but also on the thermal output of the heat source. The standard unit of measurement is the "effective temperature" which is the temperature that would be required by a gas stream flowing past the particle to produce the same heat transfer characteristics as the actual heat source involved. For forest fuels under normal ranges of size and moisture content, piloted ignition is not possible at effective temperatures below 300°C, ignition is optimum at effective temperatures of 600-700°C, and becomes increasingly less efficient until ablation temperatures are reached at 1500-2000°C where the cellulosic surface is ablated off before sufficient heat can be transferred to the interior of the fuel to produce combustible volatiles.

The dimensions of the fuel particle, particularly the ratio of surface to volume, determine the temperature rise (and hence the volatile production) produced by a heat source with a given effective temperature acting over a given period of time. Because of their high surface/volume ratio, dry leaves and grasses are the most easily ignited forest fuels found in South Vietnam.





Thermal conductivity has obvious effects on heat transfer within the fuel particle. But, for forest fuels, thermal conductivity is a function of specific gravity and moisture content with moisture having by far the greatest effect. With increasing moisture, heat is conducted into the interior more rapidly, so that the time to achieve volatile production is increased for all but the thinnest fuels, and the size of material that can be ignited within a given time is markedly decreased.

Moisture has several other effects on the piloted ignition process. Heat is required to vaporize the water and raise it to the temperature of the other volatiles. For wood with a 25% moisture content, the specific heat loss due to moisture accounts for some 15% of the total available heat yield from the fuel at maximum combustion efficiency. A more important effect of moisture is its dilution of the air-volatile mixture and consequent change in flammability limits for the combustible gases distilled from the fuel. Wood distillates cannot be ignited if water vapor exceeds 36% of the total fuel-water-air mixture.

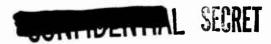
COMBUSTION OF SMALL FIRES

Once a single particle has become ignited, the early course of a forest fire consists of a series of piloted ignitions with the originally ignited fuel acting as the heat source.

First, the fuels situated within the flame zone receive heat at their surfaces by radiation, convection and conduction. Since heat is conducted into the interior of the fuel relatively slowly, the surface temperature of the fuel rises rapidly and the volatiles in the surface layer are ejected into the surrounding flames where they are burned completely as rapidly as sufficient oxygen becomes available. The carbonized layer remaining at the fuel surface then burns, radiating heat outward and conducting heat inward to produce further distillation in the interior of the fuel. When all the volatiles have been distilled from the fuel the remaining charcoal continues smouldering until all the fixed carbon has been oxidized or until heat losses by radiation lower the fuel temperature below that necessary for continued combustion.

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Second, fuels adjacent to the burning area receive radiant heat. If they absorb sufficient heat to cause distillation, volatiles will be liberated into the surrounding atmosphere. Unless the resulting mixture comes into contact with a surface at or above its ignition temperature, these gases are not ignited, but are dissipated without burning. Once sufficient surface volatiles have been driven off to leave a shell of charcoal, smouldering will take place at the surface. If the fuel continues to receive heat from outside sources, its surface temperature is



raised to a point where the gases expelled from the interior are ignited as they reach the surface. Flaming combustion is then sustained as long as distillation continues at a sufficient rate.

Third, the fuels within the convection column of hot gases but distant from the flame zone are heated by convection to the temperature of the stack gas. Since stack temperatures are quite low in comparison with flame temperatures, only fractional distillation occurs, water vapor being the principal volatile component. This progressive drying of fuels exposed to the convection column lowers their ignition temperature and increases their potential rate of combustion. When any of the fuels in this area become ignited, ignition is communicated to adjacent fuels almost instantly, and within a matter of seconds the entire mass of dried and preheated fuels may be burning. The rapid rate of combustion of preheated fuels as well as the large amount of fuel ignited almost simultaneously causes the rapid release of large quantities of heat, which may be sufficient to ignite fuels outside the preheated area.

From the preceding discussion it can be seen that the rate and intensity of combustion of any wild-land fire is determined in part by the number of fuel particles burning at any one time. Since this number is affected by the ignition time of adjacent particles, the fuel-particle variables that affect combustion include all those previously discussed as ignition variables. However, these same variables may affect combustion in ways distinct from their effects on ignition.

Again, moisture is the overridingly important variable. In addition to changing the flammability limits of the evolved gases, increasing moisture markedly lowers the flame temperature attained when the gases are ignited. Measurements on large test fires in California showed that fires burned with fuel moistures of 12% had flame temperatures of 1450-1650°C, while fires burned with fuel moistures of 25% had flame temperatures of 740-780°C. Since radiant output varies with the fourth power of the absolute temperature, the difference between these two fires as effective radiators is approximately two orders of magnitude.

In its initial stages, the course of a forest fire depends on the amount and arrangement of fuel and on the environmental factors that affect heat transfer between the fuel particles. There must be a sufficient mass of easily ignitable fuel (under 1/4 to 1/2 inch in diameter) to produce a sustaining quantity of heat. These ignitibles must be arranged so that the heat produced by burning one fuel unit can be effectively transferred to an adjacent unit. Fuel continuity, both vertically and horizontally, is vital for obtaining a self-sustaining fire.

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The three environmental factors of primary importance to incipient forest fires are relative humidity, wind, and solar radiation. Since forest fuels are hygroscopic, their moisture content is largely determined by the ambient relative humidity. Wind not only increases the rate of oxygen supply, and hence the combustion rate, but also controls flame angle and hence the convective and radiative heat transfer between the burning fuels and the adjacent unburned material. Solar radiation is not only an important heat source (in middle latitudes, noon sunshine in summer adds about 15% to the radiation received 2 feet from a small fire in pine litter), but also reduces fuel moisture by increasing surface fuel temperature (fuels in shade may have temperatures of 25°C while those in full sun are at 60°C).

LARGE FIRE BEHAVIOR - FIRESTORMS

As a forest fire increases in size and intensity, other factors begin to influence its activity. The fire becomes both a three-dimensional and a pattern phenomenon. Upper atmospheric parameters such as lapse rate and vertical sheer become important and the behavior at any given point on the fire is influenced by the behavior at other, widely separated points.

One extreme example of large fire behavior (and the one to strive for in forest incendiary operations) is the fire storm. In a fire storm, numerous small fires are ignited in a pattern such that the radiation and convection from each quickly affects those adjacent to it. When successful, the convection columns are drawn together into a single convective cell capable of rising through moderately stable layers, or even weak inversions; radiation from adjacent fires preheats the intervening fuels so that spread between fires is enhanced; and indrafts to individual fires are weakened because of the circulations around the adjoining fires, resulting in more nearly vertical flame angles with consequently increased radiation and convective heat transfer to unburned fuels. The end result is extremely rapid fire buildup and greatly increased peak intensity so that the maximum possible material is consumed.

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APPENDIX B

FUEL AND FLAMMABILITY INVESTIGATIONS OF HARDWOOD LEAVES FROM PLEIKU PROVINCE

INTRODUCTION

Sampling of forest fuels by the Emote team began on February 2, 1966, on two areas located 250 air miles north of Saigon in the central highlands. The two areas, Alpha and Omega, received different spray treatments. Ovendried samples (primarily of the family Lauraceae) were shipped to the Fire Laboratory in February and received in late April.

Fuels from the Omega area were used for fuel and flammability tests conducted during the period May 4-6, 1966. Attached dead leaves and attached green leaves were the two fuel categories investigated. Samples "A" and "B" were used in the tests as follows:

Sample A

- 1. Heat content
- 2. Ash content
- 3. Ignition test (powdered sample)
- 4. Ignition test (whole sample)

Sample B

- 1. Combustion test
 - a. E_r
 - b. Flame height
 - c. Burning efficiency
- 2. Density

Samples for heat content, ash content, and ignition test (powdered sample) were ground in an intermediate Wiley Mill. The remainder of the tests veperformed with whole samples.

The moisture content of three samples, one from Alpha area and two from Omega area, was determined by the xylene distillation method. This provides a check on the ovendry weights as determined in Saigon.

DENSITY

Density and specific gravity were determined for dead attached leaves of two different tree species in the Lauraceae family. To determine density and specific gravity it was necessary to measure weight and volume of sample material. Density and specific gravity were

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based on air-dried volume and ovendried weight (although volume was measured on air-dry material, the material had previously been ovendried).

To select sample material, five leaf sections were randomly picked from two sample bags containing cut up leaf sections from single species. Air-dried weight was measured to the nearest 0.0001 gram and adjusted to an ovendried basis. An average air-dried moisture content of 8.1 percent was used for the adjustment. This average moisture content was determined by xylene distillation of whole samples in the ovendry weight check.

Volume of sample material was determined from measurements of leaf area and thickness. Leaf area was found by tracing the outline of sample leaf sections on paper and measuring the enclosed area to the nearest .01 inch using a planimeter. Thickness was measured by a microcaliper to the nearest 0.0001 inch. For each species, 15 measurements were taken on the sample material, excluding prominent leaf veins.

Gram units were converted to pounds and inches to feet in calculating density. Sample measurements are tabulated below:

Sample Bag Number

		35	47
Specie	es	Litsea spp.	Lauraceae, not Litsea
Weigh	at:		
	Air-dry (gms.)	. 3506	.8876
	Ovendry (gms.)	. 3243	.8211
Ave.	Thickness (in.)	. 0088	. 0087
Surfac	ce Area (in. ²)	6. 72	12.40
(on	e surface)		
Volum	ne (in. ³)	. 0591	.1079
Densi	ty (lbs./ft. ³)	20.91	28.99
Specif	ic gravity	. 33	.46

HEAT CONTENT

The heats of combustion of the dead and green attached leaves were determined in an Emerson adiabatic jacket bomb calorimeter. These data provided the heat content information needed to compute the unit energy release rate phase of the combustion tests.

The dead and green leaves were ground separately, pressed into approximately 1-gram pellets, and placed in a conditioning cabinet for 24 hours over silica gel. Three replications were run for each fuel treatment (dead and green) and the results expressed as the low heat value on an ovendry weight basis. The moisture content was determined by ovendrying duplicate pellets at 103°C.

The percentages of inorganic residue remaining in each ignition pan following calorimeter runs were recorded. The final results were not corrected to an ash-free basis, however.

The calorimeter was standardized with benzoic acid before and after the sample runs.

Heat of Combustion of Dead Attached Leaves

Three runs were made in the calorimeter with these results:

4896.27 calories/gram (5.17-percent residue)

4923.73 calories/gram (5.22-percent residue)

4919.65 calories/gram (4.86-percent residue)

Average heat of combustion at 6.125-percent moisture content:

4913.22 calories/gram

Average heat of combustion (ovendry basis):

4913.22 cal./gm. ÷ (1.000 - 0.06125) = 5233.79 cal./gm.

5233.79 calories x 1.8 = 9420.82 B. t.u./lb. (high heat value)

Low heat value:

9420.82 B.t.u./lb. - 524 B.t.u./lb. = 8896.82 B.t.u./lb. 8896.82 ÷ 1.8 = 4942.68 cal./gm.



Heat of Combustion of Green Attached Leaves

Three runs were made in the calorimeter with these results:

4646. 62 calories/gram (6.06-percent residue)

4621.00 calories/gram (6.25-percent residue)

4641.29 calories/gram (6.04-percent residue)

Average heat of combustion at 6.94-percent moisture content:

4636.30 calories/gram

Average heat of combustion (ovendry basis):

 $4636.30 \text{ cal./gm.} \div (1.000 - 0.0694) = 4982.05 \text{ cal./gm.}$ $4982.05 \text{ calories } \times 1.8 = 8967.69 \text{ B.t.u./lb.}$ (high heat value)

Low heat value:

8967.69 B.t.u./lb. - 524 B.t.u./lb. = 8443.69 B.t.u./lb. $8443.69 \div 1.8 = 4690.94 \text{ cal./gm.}$

ASH CONTENT

Ash content of the dead and green attached leaves was determined following ASTM Designation: D 1102-56. Two replications were run for each fuel treatment. The ovendry powdered test samples were ignited in a muffle furnace (maximum temperature 600°C.). Ash content results are expressed on an ovendry weight basis.

	Sample	First <u>Replicate</u>	Second <u>Replicate</u>	Average Ash Content
1.	Dead attached leaves, Omega area, sample A	6.74	6.76	6.75
2.	Green attached leaves, Omega area, sample A	7.14	7.04	7.09

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OVENDRY WEIGHT CHECK

Spot checks were made on the ovendry weights of three fuel moisture samples. These checks were requested to verify the accuracy of the ovendrying procedure which was conducted in Saigon. Three entire fuel moisture samples were transferred from the plastic shipping bags to three tared xylene distillation flasks. A standard xylene moisture content run was carried out and the xylene dry weights compared to the ovendry weights.

Sample	Ovendry weight	Xylene dry weight	Deviation from Xylene dry weight
No. 14, attached leaves	23.90	23.73	+0.17
No. 64, litter	22.5	22.58	-0.08
No. 71, litter	31.8	31.69	+0.11

INVESTIGATION OF IGNITION CHARACTERISTICS

Powdered Fuel Sample

Ten replications of powdered leaf samples were randomly selected and ignited in a Jentszch Igniter for each fuel and ignition treatment. The furnace temperature was 317°C. \pm 3°. Samples were ignited under spontaneous and pilot ignition conditions. The pea-sized gas pilot flame was located 15 mm. above the sample chamber opening. Ignition delay was timed from insertion of sample into furnace until first visual indication of ignition, either glow or flame.

Moisture content was determined by ovendrying samples at 103°C. The dead leaves had a moisture content of 6.4 percent and the green leaves 7.3 percent.

An analysis of variance indicated that the spontaneous and pilot ignition delays for the green leaves were significantly longer (99-percent level) than the values for dead leaves. No significant difference existed between spontaneous and pilot ignition delays within a fuel treatment. This is the first time that the pilot ignition delay has not been significantly shorter than the spontaneous ignition delay for a given fuel.

Ignition Delay Test (Powdered Sample) - Jentszch Igniter

	Fuel Sample	Spon. Ign. Delay	Moisture Content	Pilot Ign. Delay	Moisture Content
		Sec.	Percent	Sec.	Percent
1.	Dead attached leaves	29.11	6.4	28.47	6. 4
2.	Green attached leaves	35.86	7.3	34.16	7.3
3.	Ponderosa pine needles	35.79	6.4	20.06	3.1
4.	Sphagnum moss	19.67	10.6	15.18	5.6
5.	Cheatgrass	41.00	5.1	36.92	5.1
6.	Medusahead	45.64	4.4	35.08	4.4

Furnace temperature: 317°C. ± 3°C.

Whole Fuel Sample

The determination of ignition temperatures was accomplished using the modified muffle furnace designed by E. C. Lory and D. S. Stockstad for ignition studies at the Northern Forest Fire Laboratory. This furnace consists essentially of three electric heating elements surrounding a double-walled glass tube ignition chamber. Each heating element is individually controlled and a high degree of temperature control is possible in the ignition chamber. A constant flow of air (5 liters per minute) preheated to the ignition chamber temperature is passed through the furnace during testing operations.

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Preliminary experimentation with the fuels revealed two sections of leaf $1-1/2 \times 1/4$ inches to be the most desirable size sample for ignition temperature determinations. Samples of this size could quite readily be obtained from an individual leaf and also simplified the placement of a thermocouple for surface temperature measurements. Two sections of leaf were found to be necessary to supply volatiles in a concentration rich enough for pilot ignition to occur. Fuel moisture content of the samples was 8.1 percent.

Preliminary experiments also indicated that the sample sections would not glow but only char during spontaneous or self-ignition tests. Furnace temperatures of 310°C. to 340°C. were tried but all produced only the charring effect. For this reason the spontaneous ignition



tests were discontinued and only pilot ignition tests conducted. An ignition chamber temperature in the proximity of 340°C. was found to be necessary for pilot ignition to occur.

Pilot ignition was accomplished by heating the leaf sections until the volatiles were ignited by a small gas flame (2 mm. long) positioned directly above and 5 mm. from the sample. Signals from a 0.003-inch chromel-alumel thermocouple placed in contact with the surface of the sample were fed into an X-Y recorder and plotted against the time to ignition. The actual temperature of ignition was considered to be the point on the trace at which an abrupt rise in temperature began and which corresponded to the visual observation of a flame flashing from the pilot to the surface of the sample.

The results of the tests are given in Table 1. Ten determinations were made on each of the fuel samples and the mean ignition temperature and time-to-ignition are given for each series of ten tests. The results of similar tests conducted on 1-inch sections of ponderosa pine needles (approximately 7-percent moisture content) are reported for comparison. The ten tests on the Omega A - Dead (54) and Omega A - Dead (66) samples were combined for statistical treatment as were the tests on samples Omega A - Green (8) and Omega A - Green (74).

Table 1. Pilot Ignition Tests of Viet Nam Fuels and Ponderosa Pine Needles

Sample	Average Pilot Ign. Delay	Average Ignition Temperature	Average Furnace Temperature
	Sec.	<u>°с</u> .	<u>°с</u> .
Omega - A - Dead (54)	11.06	344	341-344
Omega - A - Dead (66)	14. 64	332	339-341
Omega - A - Green (8)	8.14	345	343-345
Omega - A - Green (74)	5.07	318	341-344
Ponderosa pine needles	16.08	320	337-341

Statistical comparisons revealed no significant difference to exist between the ignition temperatures for the dead attached leaves, green attached leaves, or the ponderosa pine needle samples. A significant difference at the 99-percent level of confidence was found to exist in the time-to-ignition of all three fuel types tested. The mean time-to-ignition for the green

attached leaves was approximately one-half of that for the dead attached leaves and approximately one-third of the time required for the ponderosa pine needles to ignite.

BURNING TEST APPROACH AND PROCEDURE

The purpose of the burning tests was to obtain some measure of the efficiency for these fuels to release their stored chemical energy during the combustion process. A reference was needed for rating purposes and ponderosa pine needles were selected since much of our work has been with this fuel. In order to achieve similar burning conditions in the reference and test fuels, a dimensionless number representing the product of fuel particle surface area-to-volume ratio, σ , and fuel bed void volume-to-total surface area, λ , was used for control. Beds of the reference fuel were built to achieve the same $\sigma\lambda$ product as was determined for the test fuel.

Baskets with a 0.5 ft. ² loading area, 3-inch screen sides, and an asbestos sheet base were used to hold the fuel. The test fuel in one sample bag was emptied into the basket so the bed of fuel would be as porous as possible without mechanical supports. The depth of fuel and its weight were measured and used to establish a reference fuel bed. The fuel bed was surface ignited using a xylene saturated string laid over the surface. The string added about one gram weight.

Measurements made during the burning period were flame height and burning rate. Flame height was measured visually using a reference scale behind the flame. Burning rate was sensed by a semiconductor strain gage weighing system and its signal recorded on a strip-chart recorder. The weighing system was calibrated before each fire and had a sensitivity of 0.33 gms. per chart division.

From these tests the maximum burning rate was measured and compared to that of the reference fuel. The burning efficiency, how much of the total weight was burned, was determined. The height of the flame plume was compared to that of the reference fuel and showed the same trend as the burning rate comparison. These tests gave some insight as to the burning characteristics of the test fuels. The results are given in the tabulation section.

Sample	No.	Weight loss Rate	Heat Content	E _R	Fuel Depth	E _R (Omega) E _R (p.pine)	Flame Height Ratio	Burning Effi- ciency	6
		lb./ft.²-min.	B.T.U./lb.	B. T. U. ft. ² -min.	Inches	Percent	Percent	Percent	
PP 3		0.366	8744	3200	1-1/2				31.2
Green	-	0.121	8444	1022	1-1/2	32	43	69	31.4
PP 7		0.274	8744	2396	1 - 3/4				41.8
Green	124	0.147	8444	1240	1 - 3/4	52	57	73	41.4
PP 8		0.198	8744	1731	1-1/8				33.4
Green	97	0.170	8444	1439	1-1/8	83	42	43	32.9
PP1		0.262	8744	2291	1-1/4				34.1
Green	12	0.208	8444	1756	1-1/4	77	61	91	34.1
Dead 1	2	0.204	8897	1815	1-1/4	79	29	78	34.1
		0.180	8744	1574	1				40.0
Green	9	0.159	8444	1344	-	85	80	82	39.7
PP 5		0.131	8744	1145	3/4				28.2
Green	92	Poor Burn	8444		3/4		15	29	27.1
Green	79	0.111	8444	937	3/4	82	64	20	26.5
PP2		0.145	8744	1270	3/4				35.2
Green	4	0.226	8444	1908	3/4	150	22	53	34.6
Dead	129	0.141	8897	1254	3/4	66	29	48	34.6
PP 10		•	8744	1854	1-1/2				6.79
Dead	136	0.129	8897	1146	1-1/2	62	29	71	
PP 6		0.159	8744	1389	1-1/8				41.8
Dead	15	0.129	8897	1146	1-1/8	83	42	89	
Dead	104	0.160	8897	1422	1-1/8	102	75	82	41.1
PP 11		0.194	8744	1696	3/4				39.5
Dead	110	0.105	8897	934	3/4	55	64	87	38.5
PP 12		0.294	8744	2571	1-1/4				31.7
Dead	16	0.171	8897	1523	1-1/4	59	20	99	31.1

BURNING CHARACTERISTICS OF "B" SAMPLES FROM OMEGA AREA WITH PONDEROSA PINE NEEDLES AS REFERENCE FUEL

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APPENDIX C

IGNITION REQUIREMENTS: RATIONALE FOR COMPUTATIONS

A. ENERGY RELEASE RATE THEORY

- 1. The energy release rate resulting from an incendiary unit applied to a wildland fuel bed is the sum of three distinct release rate components:
 - a. $\left(\frac{d}{d}\frac{E}{t}\right)_{in}$, the energy release rate of the incendiary fuel mixture, which may be approximated by

$$\left(\frac{d E}{d t}\right)_{in} = \frac{W_i \times (c/w) \times E_{io} \times f}{\Delta t_{equiv.}}$$
(1)

where W_i = the ordnance (nominal) weight of the incendiary unit

(c/w) = the charge-to-weight ratio, or the percent of the ordnance weight which is incendiary fuel

E_{io} = the unit energy available (i.e., heat content) of the incendiary material, Btu/lb.

f = a fraction approximating the percentage of the total available heat which is released during the equivalent uniform flaming period, 0 < f < 1

Δt_{equiv.} = the period, in seconds, during which the incendiary is actively flaming, or the equivalent uniform burning period.

b. The energy release rate of the burning wildland fuel in the area of A_i , initial ignition, (with a caloric content of 8000 Btu/lb), which is

$$\left(\frac{d E}{d t}\right)_{i, viol.} = \frac{\text{Weight of fuel x 8000 x E}_{frac, viol.}}{\Delta t_{viol.}}$$
(2)

$$\frac{\left(\frac{d E}{d t}\right)}{i, resid.} = \frac{\text{Weight of fuel x 8000 x E}_{frac, resid.}}{\Delta t_{resid.}}$$
(3)

and

c. The energy release rates (violent and residual) of the areas into which the fire spreads:

$$\frac{\left(\frac{d E}{d t}\right)}{s, viol.} = \frac{\text{Weight of fuel in } A_c^{\dagger} \times 8000 \times E_{frac, viol.}}{\Delta t_{viol.}}$$
(4)

$$\left(\frac{d E}{d t}\right) = \frac{\text{Weight of fuel in } A_c^{"} \times 8000 \times E_{frac, resid.}}{\Delta t_{resid.}}$$
(5)

where

A is the total area of spread involved for a given interval of time,

 A_c^{l} is the portion of area A_c in the violent burning stage

 $A_c^{\dagger\dagger}$ is the portion of area A_c in the residual burning stage.

In computing the energy release rates associated with a single ignition and subsequent spread, areas of spread corresponding to five minute time intervals were characterized, and release rates of all contributing factors, as listed above, summed, for a given time in that interval.

Example:

$$r = 0.5 \text{ acre/hour} = 21,780 \text{ ft}^2/\text{hour}$$

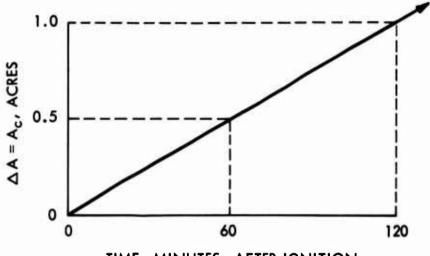
 ΔT = chosen equal to 5 minutes = 1/12 hour.

Therefore

$$A_c = 1820 \text{ ft}^2$$

Equations (4) and (5) now can be used to compute energy release rates in area A_c as a function of time if A_c' and A_c'' can be computed.

A graph of spread area versus time, is shown below.



TIME, MINUTES, AFTER IGNITION
GRAPH-SPREAD AREA VS. TIME

The total area burning and burned out at any time t because of spread, in addition to an initial area $\mathbf{A_i}$ is

$$\Delta A = \frac{t}{120} = A_c \tag{6}$$

where t is in minutes, and $\Delta \, A$ and $A_{\mbox{\bf c}}$ are in acres.

The total area in the violent burning regime at any time t, where Δt_{viol} = 10 minutes, is

$$A_{c}^{\dagger} = \Delta A_{viol} = \frac{t}{120}$$
 (7)

if $0 \le t \le 10$ minutes, and

$$A_{c}^{\dagger} = \Delta A_{viol} = \Delta A_{(t)} - \Delta A_{(t-10)}$$
 (8a)

$$= \frac{1}{12} \text{ acre}, \tag{8b}$$

if $t \ge 10$ minutes.

The area that is in the residual burning regime at any time t, where $\Delta t_{resid.} = 70$ minutes, is

$$A_{c}^{"} = \Delta A_{resid.} = \Delta A_{(t-10)}, \qquad (9)$$

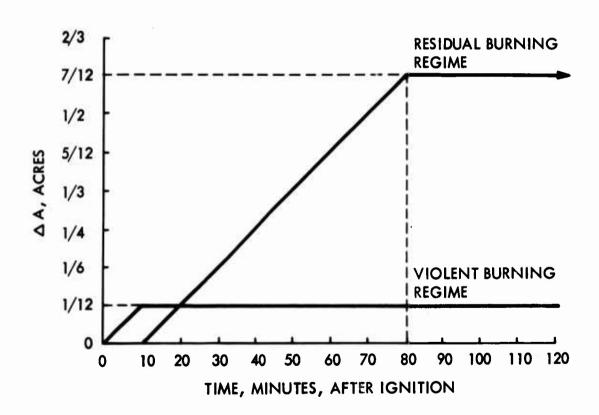
if $10 \le t \le 80$ minutes, and

$$A_{c}^{"} = \Delta A_{resid.} = \Delta A_{(t-10)} - \Delta A_{(t-80)}$$
 (10a)

$$= \frac{7}{12} \text{ acre,} \tag{10b}$$

if t≥80 minutes.

Plotting Eqs. (7) through (10b),



Also, in general form, at any time t,

B. COMPUTATION OF INCENDIARY ENERGY RELEASE RATES

Equation (1) is applied to the specific ordnance as shown below.

1. M74

$$W_{i} \times \frac{c}{w} \times E_{io} \times f = 38,000 \text{ Btu}^{\#}$$

Then

$$\left(\frac{\text{d E}\Delta t=10 \text{ min.}}{\text{d t}}\right) = \frac{38,000 \text{ Btu}}{600 \text{ sec}}$$

$$= 63 \text{ Btu/sec}$$
(12)

2. Napalm ''B''

$$W_i = 500 \text{ lb}$$
; (c/w) = 0.8*; $E_{io} = 20,000 \text{ Btu/lb*}$; $f = 0.8*$; $\Delta t_{equiv} = 10 \text{ min}$

Therefore

$$\left(\frac{d E}{d t}\right)_{in} = \frac{500 \text{ lbs x 0.8 x 20.000 Btu/lb x 0.8}}{600 \text{ sec}}$$
(13)

= 10,700 Btu/sec equivalent uniform energy release rate (Napalm ''B'' 500 lb)

3. Wesco Mix

$$W_i = 500 \text{ lb}$$
; (c/w) = 0.8*; $E_{io} = 20,000 \text{ Btu/lb*}$; $f = 0.8*$; $\Delta t_{equiv} = 2 \text{ min}$

[#] Bond, H., Fire and the Air War, 1946, NFPA, Boston, Mass., p. 75.

^{*} Assumed by Dikewood project personnel. 19

Therefore

$$\frac{\left(\frac{d E}{d t}\right)}{in} = \frac{500 \text{ lbs } \times 0.8 \times 20,000 \text{ Btu/lb} \times 0.8}{120 \text{ sec}}$$

$$= 53,500 \text{ Btu/sec equivalent uniform energy}$$

$$\text{release rate (Wesco 500 lb)}$$
(14)

The incendiary energy release rates constitute one of the three components of total energy release rate discussed in A.

C. COMPUTATION OF WILDLAND FUEL ENERGY RELEASE RATES

The energy release rates of the wildland fuel in the initial ignition area and in the spread areas constitute the remaining two components of total energy release rate. These rates are computed as follows.

Density: 20 tons/acre (medium brush)

Burning characteristics:

$$\Delta t_{viol.} = 10 \text{ min}$$
 $E_{frac, viol.} = 0.4$ $\Delta t_{resid.} = 70 \text{ min}$ $E_{frac, resid.} = 0.6$

$$\frac{\left(\frac{d E}{d t}\right)}{\text{resid}} = \frac{8,000 \text{ (Btu/lb) x 0.92 psf x 0.6}}{4200 \text{ sec}} = 1.05 \text{ Btu/sec - ft}^2 \tag{16}$$
resid, unit area

From Eq. (15),

$$\left(\frac{d E}{d t}\right)$$
 = 1,820 x 4.9 = 8920 Btu/sec (17)

for each complete spread cycle of 1,820 sq ft burning in the violent regime only, and

$$\left(\frac{d E}{d t}\right)$$
 = 1,820 x 1.05 = 1,900 Btu/sec (18)

for each complete spread cycle of 1,820 sq ft burning in the residual regime only.

Also, in general form,

$$\frac{\left(\frac{d E}{d t}\right)}{s, viol.} = A_c^t (4.9)$$
 (19)

$$\left(\frac{d E}{d t}\right) = A_{c}^{"}(1.05)$$
s, resid. (20)

where $A_c = A_c^{\dagger} + A_c^{\dagger}$.

D. INITIAL IGNITION AREA WILDLAND FUEL DATA

- 1. M35 Cluster, using M74 individual units
 - a. Ground coverage = $15' \times 0.2'$ (tail ejection M74) = 3 sq ft

b.
$$\left(\frac{d E}{d t}\right)_{i, \text{ viol.}} = 3 \text{ ft}^2 \times 4.9 \text{ Btu/sec} - \text{ft}^2 = 14.7 \text{ Btu/sec}$$
 (21)

c.
$$\left(\frac{d E}{d t}\right)$$
 = 3 ft² x 1.05 Btu/sec - ft² = 3.15 Btu/sec (22) i, resid.

- 2. Napalm, finned, aimable, 500 lb Type "B" fuel
 - a. Ground coverage = $30^{\circ} \times 75^{\circ} = 2,250 \text{ ft}^2$

b.
$$\left(\frac{d E}{d t}\right)$$
 = 2,250 ft² x 4.9 Btu/sec - ft² = 11,000 Btu/sec (23)

c.
$$\left(\frac{d E}{d t}\right)$$
 = 2,250 ft² x 1.05 Btu/sec - ft² = 2,360 Btu/sec (24) i, resid.

- 3. Napalm, "Wesco mix," finned, aimable, 500 lb
 - a. Use same ground coverage as Napalm B, 2,250 ft²
 - b. Therefore

$$\left(\frac{d E}{d t}\right) = 11,000 \text{ Btu/sec}$$
i, viol. (25)

and $\left(\frac{d E}{d t}\right)$ = 2,360 Btu/sec (26)

E. COALESCENCE OF MULTIPLE FIRES

1. Let n be the number of incendiary weapon initiated fires within an area A. If the initial area per fire is a_i (no spread), the total area on fire initially, before spread begins, is

$$A_{T} = na_{i} \tag{27}$$

2. Knowing $A_{\tilde{I}}$ from Eq. (27), the total available area into which fires can spread is just

$$A_{av.sp.} = A - A_{I}$$
 (28)

3. The area available for spread from each ignition is

$$A_{av,sp/fire} = \frac{A - A_I}{n}$$
 (29)

4. Given an areal spread rate "r", the time to coalescence is

$$t_{c} = \frac{A - A_{I}}{nr}$$
 (30)

5. Equation (30) can be solved to give a number of ignitions necessary to yield coalescence at any specified time t_c ; i.e.,

$$n_{c} = \frac{A}{a_{i} + rt_{c}}$$
 (31)

where $\mathbf{n}_{\mathbf{c}}$ represents the number of ignitions necessary to produce coalescence at time $\mathbf{t}_{\mathbf{c}}.$

- 6. Equation (31) is the basis for generating the coalescence loci on curves A, B, and C.
- 7. The actual equations used were:
 - a. For M74 incendiary units

$$n_{c} = \frac{19.2 \times 10^{5}}{t_{c}}$$
 (32)

b. For Napalm B and Wesco Mix

$$n_{c} = \frac{19.2 \times 10^{5}}{(t_{c} + 6.2)} \tag{33}$$

The basic equation used to compute inrush wind velocity at the periphery of the target area is

$$v_{\rm W} = \frac{(88 \times 10^{-3}) \left[\frac{\rm d \ E_{\rm T}}{\rm d \ t}\right]^{1/3}}{6\sqrt{\rm A}}$$
 (34)

where

 v_{w} is in miles per hour,

 $\frac{d E_{T}}{d t}$ is the total energy release rate over the affected area, in Btu/sec,

(A) is the target area, in square miles.

APPENDIX D

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APPENDIX E.

Fire Weather Probabilities

I. Single sites

Given:

 P_{H} = probability of a heavy rain within a day

P_I = probability of a light rain within a day

P_a = probability of an overcast day

Ph = probability of a half-overcast day

P_a = probability of a clear day

Assuming that:

- 1) Present weather is independent of past weather.
- 2) No drying occurs on rainy or overcast days (zero "drying days").
- 3) A half-overcast day is equivalent to one-half "drying day."
- 4) A clear day is equivalent to one "drying day."
- 5) A fire will burn if 5 or more "drying days" have accumulated since the last heavy rain provided that 2 or more "drying days" have accumulated since the last light rain.

What is the probability that at least one "burning day" will occur within an N day weather watch, (N = 1, 2, ..., 15), if

- A) when the weather watch is instituted, 3 "drying days" have accumulated since the last heavy rain?
- B) when the weather watch is instituted, no "drying days" have accumulated since the last heavy rain?

We recognize that a given site on any given day may require 0, 1/2, 1, 1-1/2, . . . 5 "drying days" before being in a suitable condition for burning. Thus, a site may be described as being in one of the following states:

State <u>Number</u>	"Drying Days" Needed	Days Since <u>Heavy Rain</u>	Days Since <u>Light Rain</u>
1	5	0	-
2	4-1/2	1/2	_
3	4	1	-
4	3-1/2	1-1/2	_
5	3	2	-
6	2-1/2	2-1/2	-
7	2	3	0
8	1-1/2	3-1/2	1/2
9	1	4	1
10	1/2	4-1/2	1-1/2
11	0	5	2
12	0	5-1/2	2-1/2
13	0	6	3
• •	••	• •	••

The desired probabilities for questions A and B above are then

- A) The probability that a site now in state 7 arrives at state 11 in no more than N steps.
- B) The probability that a site now in state 1 arrives in state 11 in no more than N steps.

Since we have assumed that present weather is independent of past weather, the problem may be formulated as a Markov chain; that is, the progress of drying may be described as a random or stochastic process which moves from state i to state j with probability $q_{ij}^!$ where the $q_{ij}^!$ depend only on the present state of the process.

The matrix Q' of single step transition probabilities, q'_{ij} , in terms of the P_j described earlier are given in Table 1. The probabilities we require for questions A and B can easily be derived from these single step probabilities. We form the matrix Q (Table 2) from Q' by

making state 11 an absorbing state and compute the N step transition matrix $Q^{(N)}$ by raising Q to the N-th power. The desired probability for question A is then $q_{7,11}^{(N)}$ and, for question B, $q_{1,11}^{(N)}$. Both occur in the right most column vector of the matrix. Hence, instead of $Q^{(N)}$ we may compute $Q^{(N-1)}q$ where q is the eleventh column of q. The computations were performed from right to left as

Each multiplication was then a matrix by a column vector; no multiplication of Q by itself was necessary.

II. Multiple sites

Find the probability that at least one of M sites (M = 1, 2, ..., 10) will experience at least one "burning day" within an N day weather watch (N = 1, 2, ..., 15) if, when the weather watch is instituted, 3 "drying days" have accumulated at each site since the last heavy rain.

These probabilities were calculated from the formula

$$P_{M,N} = 1 - (1 - P_N)^M$$

where

 $P_{M,N}$ = desired probability for M sites and an N day watch

 P_{N} = single site probability from I $(q_{7.11}^{(N)})$.

The basic assumption here is that the weather at one site is <u>independent of the weather</u> at any other site.

III. Unconditional probabilities

What is the probability that a random day is a burning day?

For the solution to this problem, we return to the matrix Q' of part I. The desired probability, U, is the probability that the process is found to be in state 11 or a higher state

on a random day. If the ui are the probabilities from the stationary distribution of the chain, then

$$U = \sum_{i=11}^{\infty} u_i = 1 - \sum_{i=1}^{10} u_i$$
.

The stationary probabilities satisfy the system of equations

$$u Q' = u$$

where u is a row vector with elements u, and Q' is the extension of Q. A stepwise solution of the system for the first ten u, was obtained with the following formulae:

$$u_1 = P_H/(1 - P_a - P_L)$$

$$u_2 = u_1 P_b / (1 - P_a - P_L)$$

$$u_i = (P_c u_{i-2} + P_b u_{i-1})/(1 - P_a - P_L)$$

$$i = 3, 4, 5, 6$$

$$u_7 = \left[P_c u_5 + P_b u_6 + P_L (1 - \sum_{i=1}^{6} u_i) \right]$$
 (1 - P_a)

$$u_i = (P_c u_{i-2} + P_b u_{i-1})/(1 - P_a)$$

$$i = 8, 9, 10$$

TABLE 1.

TABLE 2.

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39 SECRET



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F-VINH
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A-SOC TRANG

H-PHNOM PEHN

N-VIENTIANE
P-LUANG PRABANG
R-PHONG SALY

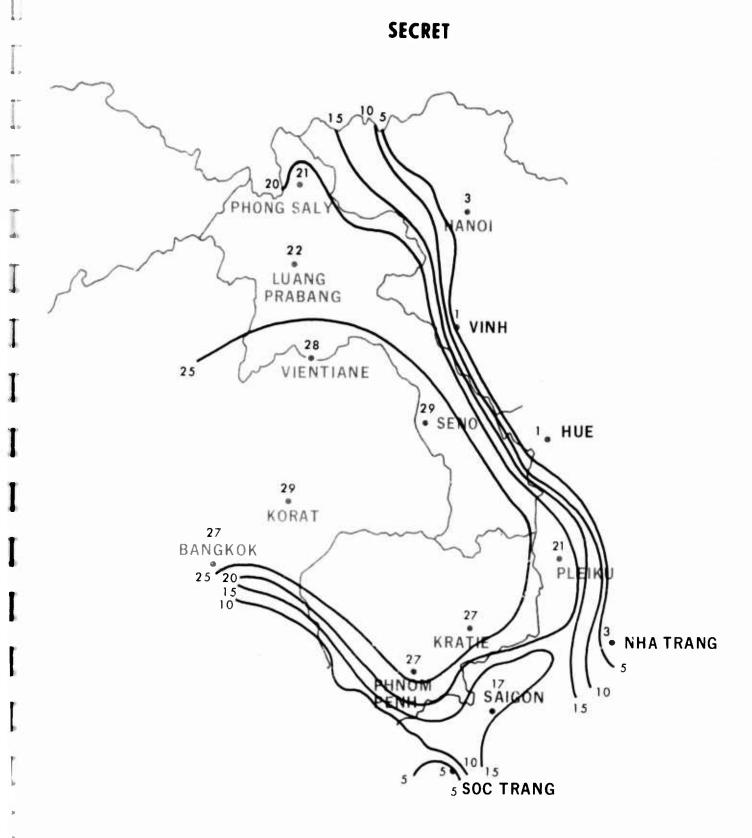
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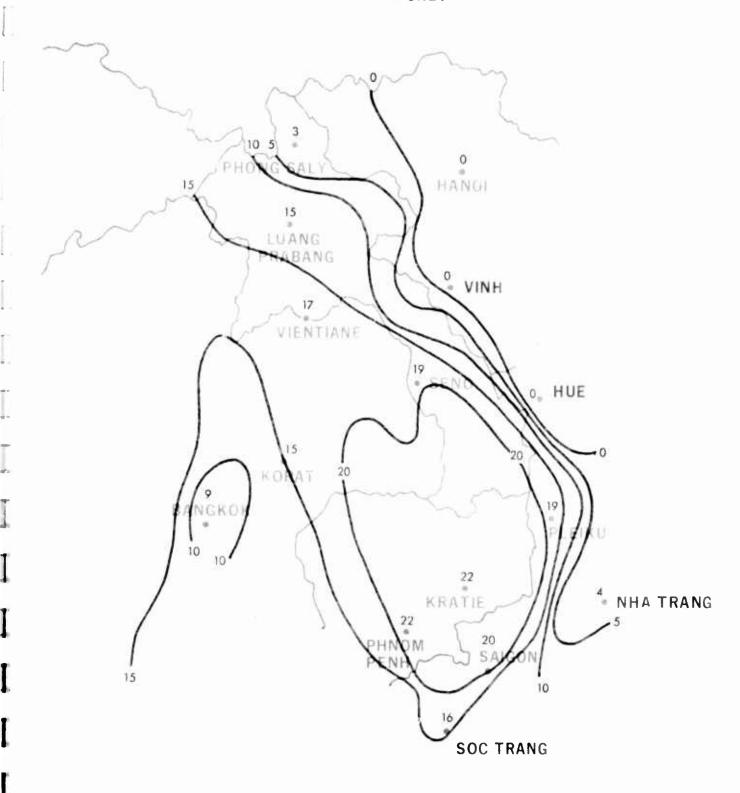
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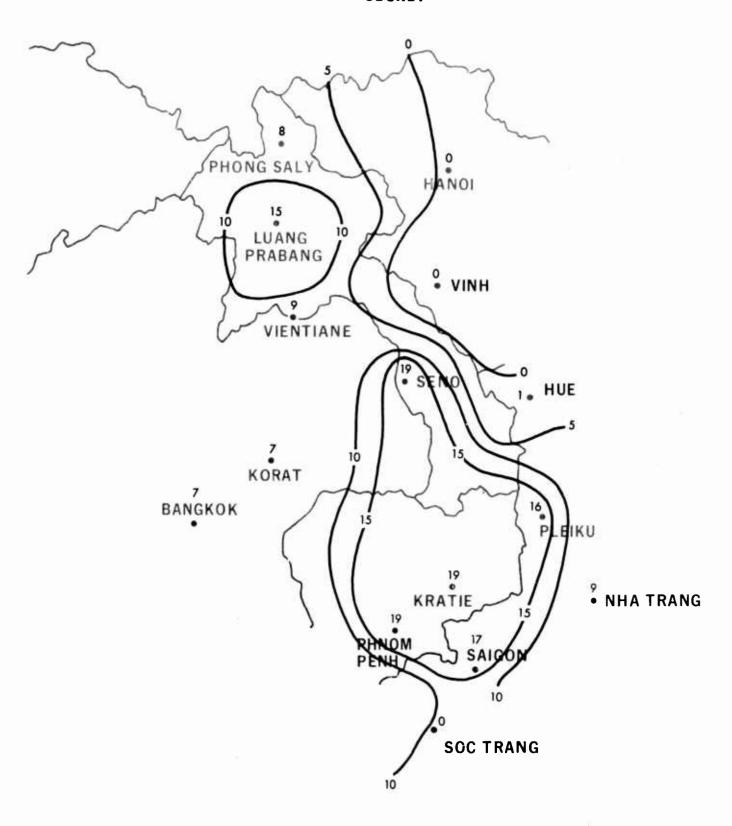
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January 41 SECRET



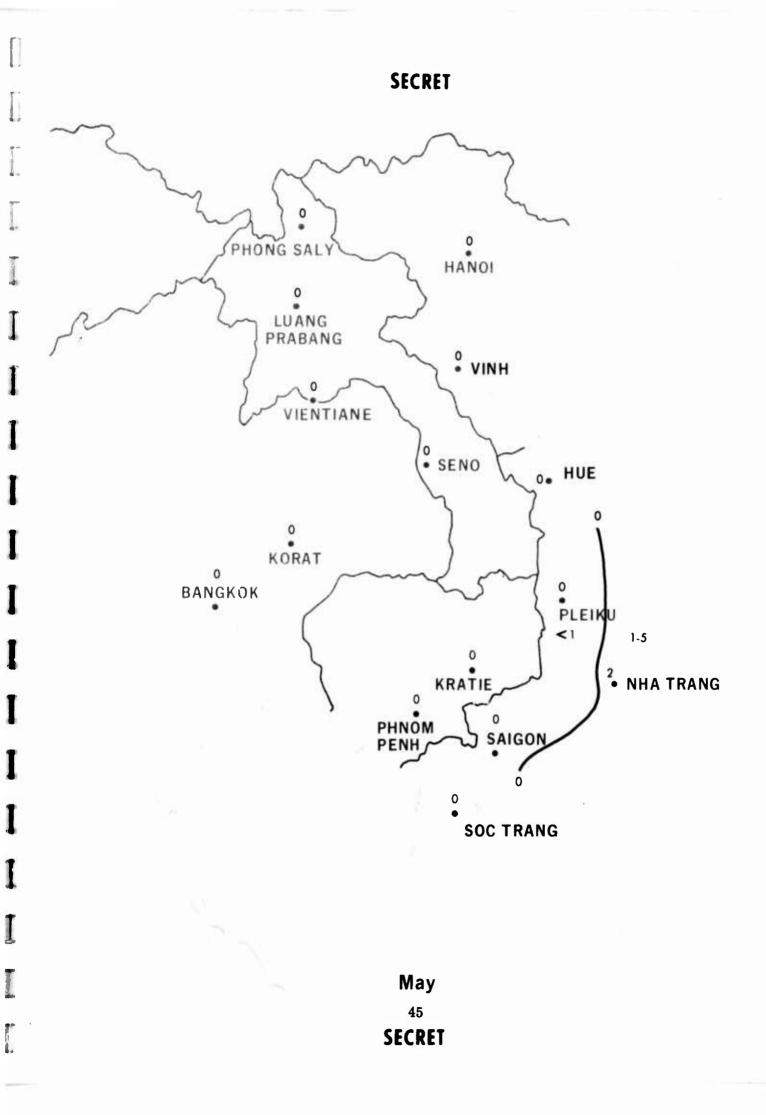
February 42 SECRET

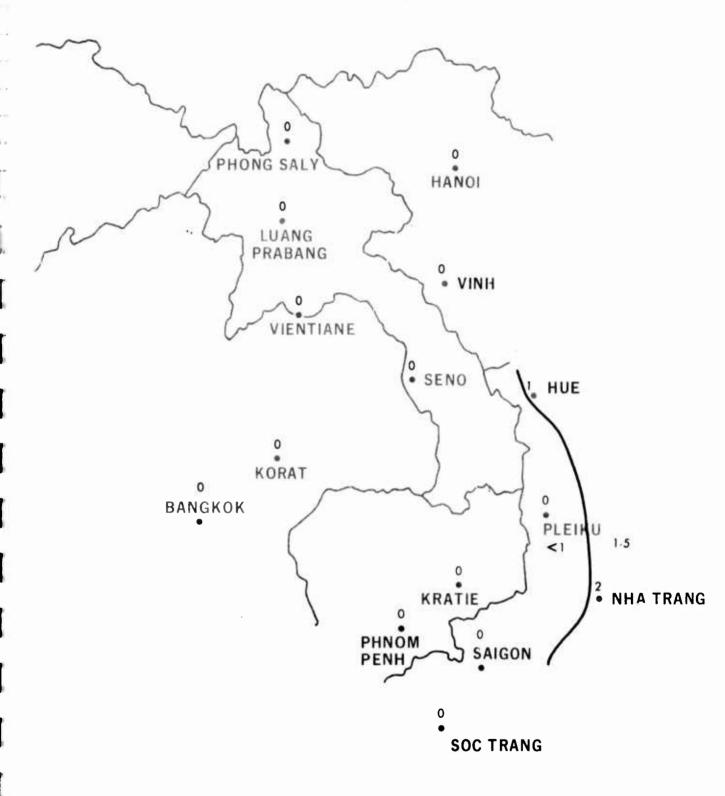


March 43 SECRET

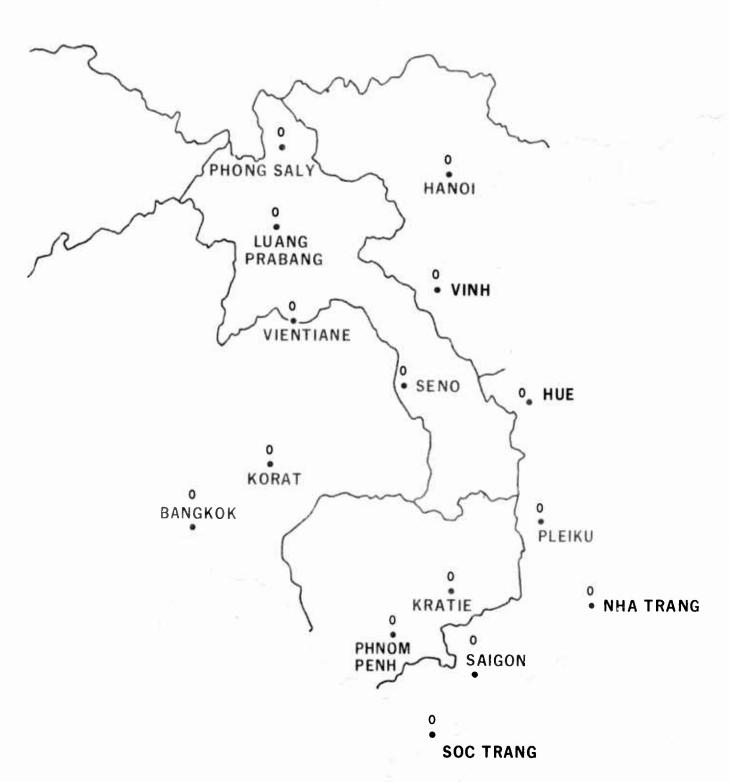


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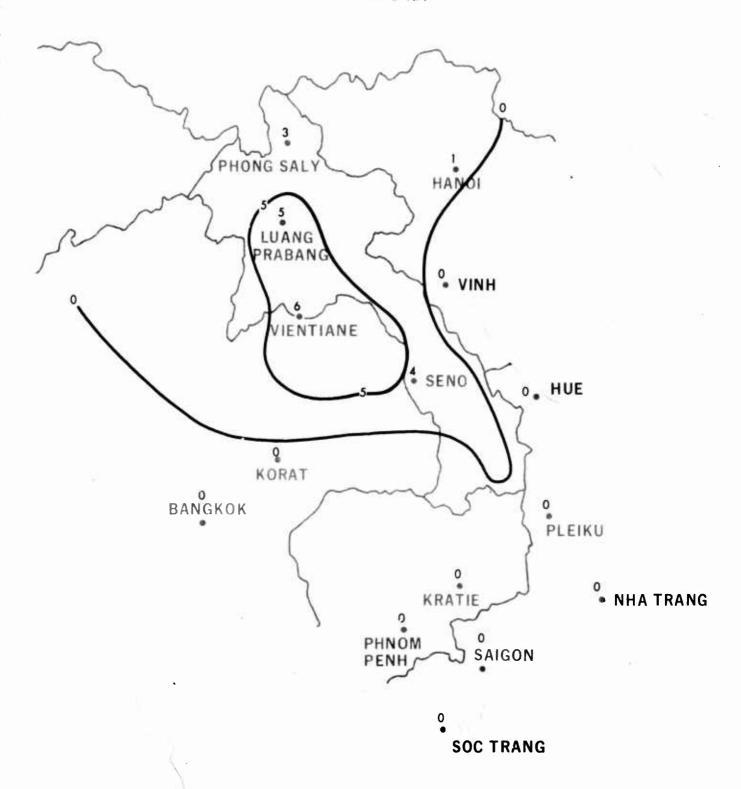


June 46 SECRET

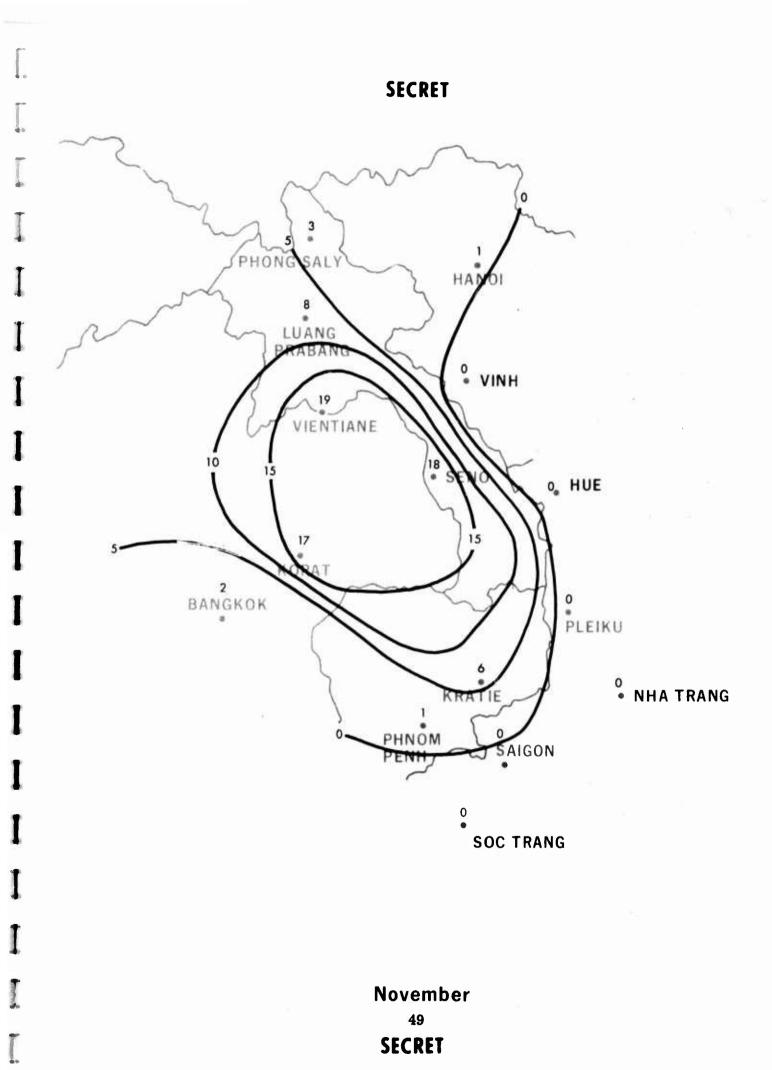


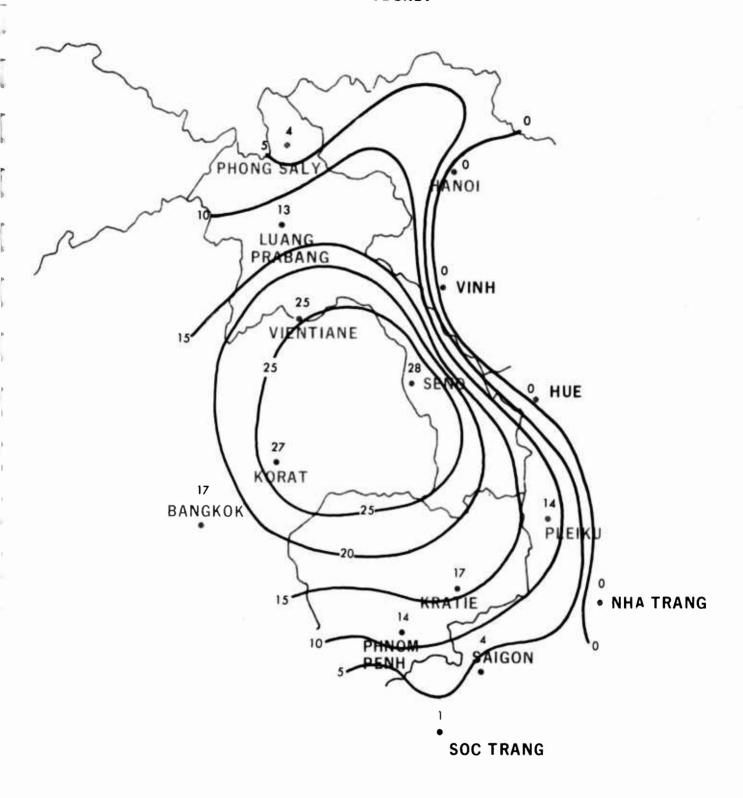
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CULUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

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CULUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

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COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

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COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

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CCLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

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CULUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

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COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

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STATION B FEB

INPUT DATA

.026 .321

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

AVAILABLE ROW HEADS ARE DAYS SINCE WEATHER COLUMN HEADS ARE NUMBER OF SITES

1.000 1.000 1.000 1.000 1.000 0.930 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 0.992 1.000 1.000 0.999 1.000 0.985 1.000 0.245 0.997 1.000 1.000 0.973 0.999 0.993 1.000 0.735 0.951 0.654 0.999 0.980 0.995 0.999 0.982 966.0 0.947 0.992 0. 0.089 0.412 0.700 0.859 0.975 0.931 0.961 .625 .804 .841

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AFTER HEAVY STARTING DAY SINGLE SITE COLUMN XX 1S

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STATION B MAR

DATA [RPUT 640.

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.355 .226

PROBABILITY THAT AT LEAST ONE SITE BECOMES WEATHER WATCH IS INSTITUTED READY AFTER

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.999 0.738 0.981 0.972 0.998 0.958 966.0 0.993 0.938 0.985 0.907 0.862 0.970 0.488 0.795 0.940 0.415 0.878 0.695 0.331 0.754 0.235 0.547 .327 .504

0.999 1.000 1.000 0.997 1.000 0.999 0.993 0.999 1.000 0.998 0.981 0.992 966.0 866.0 9.60 0.984 0.948 0.989 0.912 0.861 0.937 0.951 .704 .628 .779 .750

0.034 0.095 0.162 0.262 0.380 0.468 0.544 0.607

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AFTER HEAVY SITE STARTING DAY SINGLE COLUMN XX 1S

STATION B APR

NPUT DATA

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

RUW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.000 0.004 0.013 0.055 0.064 0.114 0.144 0.031 0.335 0.998 0.945 0.995 0.996 0.792 0.982 0.992 0.997 0.998 0.999 0.997 666.0 0.973 0.991 0.926 0.986 0.993 966.0 0.995 966.0 0.998 0.998 0.997 096.0 0.600 0.902 0.978 0.985 0.988 0.992 0.993 966.0 966.0 0.715 0.997 0.940 0.869 0.965 0.975 0.980 0.666 0.982 0.985 0.989 0.993 0.987 166.0 0.943 696.0 019-0 0.824 0.976 0.986 0.910 0.957 996.0 0.972 0.980 0.983 0.865 906.0 0.928 0.765 0.938 9.944 0.950 0.955 996.0 0.185 0.544 196.0 0.971 0.975 0.466 0.799 0.852 0.878 0.909 0.892 0.917 0.933 0.151 0.901 0.941 0.700 0.115 0.375 0.581 0.762 0.794 0.823 0.834 0.845 0.857 0.869 0.880 0.811 0.891 0.440 0.078 0.615 0.726 0.269 0.552 0.685 0.651 0.698 0.712 0.742 0.671 604. .330 .360 .439 .463 .507 .451 .477 .492 -145 .426 2 13 30 m

CULUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

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STATION B MAY

INPUT DATA

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.540 0.522 0.552 0.556 0.560 0.564 0.568 0.367 0.477 0.485 0.526 0.530 0.442 0.503 0.515 0.518 0.522 0.511 0.404 9440 0.410 0.489 0.463 0.474 0.307 0.478 0.485 0.493 0.481 0.497 0.430 0.433 0.437 0.404 0.426 0.420 0.440 0.385 0.389 0.358 0.379 960.0 0.382 0.392 0.309 0.334 0.336 0.328 0.331 0.272 0.280 0.267 0.275 0.277 0.282 0.167 0.214 0.049 0.128 0.176 0.199 0.208 0.212 0.216 0.218 0.151 0.154 0.137 0-144 0.148 0.150 0.147 .079 .045 .076 .078 .080 .081 .077 .080 .082 .071 .075 .063 13 2 12

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COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

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STATION B JUNE

DATA INPUT .470

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190.

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.001 00000 00000 00000 00000 00000 00000 0.001 0.270 0.274 0.240 0.260 0.276 0.201 0.246 0.120 0.183 0.238 0.250 0.253 0.254 0.255 0.252 0.197 0.229 0.035 0.108 0.214 0.222 0.230 0.230 0.095 0.145 0.190 0.203 0.175 0.197 0.204 0.205 0.201 0.202 0.205 0.027 0.082 0.126 0.165 0.172 0.175 0.179 0.152 0.176 0.177 0.178 0.178 0.069 0.140 0.150 0.022 0.128 0.145 0.148 0.149 0.151 0.150 0.152 0.151 0.055 0.018 0.086 0.104 0.114 0.120 0.118 0.122 0.123 0.121 0.122 0.065 0.079 0.086 0.013 0.093 0.042 0.000 0.092 0.093 0.094 0.092 0.094 0.009 0.059 0.063 0.028 0.044 0.054 0.062 0.063 0.063 0.063 0.064 190.0 +10. .030 .032 .032 .022 .032 .032 .032 .032 .032 .027 .031

HEAVY AF TER SINGLE SITE STARTING DAY CULUMN XX IS

STATION B JULY

INPUT .454

.029 .323

•065

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN CULUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.344 0.380 0.397 904.0 0.410 0.413 0.415 0.417 0.419 0.423 0.421 0.425 0.387 0.251 0.316 0.349 0.366 0.374 0.389 0.378 0.381 0.383 0.385 0.390 0.392 0.347 0.317 0.333 0.340 0.345 0.349 0.352 0.351 0.354 0.256 0.284 0.305 0.309 0.311 0.315 0.298 0.313 0.316 0.318 0.111 0.202 0.096 0.249 0.268 0.274 0.275 0.262 0.272 0.277 0.224 0.149 0.190 0.234 0.235 0.232 0.237 0.190 0.155 0.188 0.183 0.193 0.194 0.195 961-0 0.197 0.049 0.119 0.133 0.145 0.146 0.148 0.149 0.150 0.150 0.092 0.141 0.151 0.152 0.099 0.100 0.091 960.0 0.102 0.103 0.104 0.062 0.081 0.101 0,102 .051 .047 .049 .051 .052 .053 .053 .053 .032 .041 .052 .053 .017 13 11112 8

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> AFTER HEAVY STARTING DAY COLUMN XX IS SINGLE SITE

STATION B AUG

INPUT DATA 665.

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PROBABILITY THAT AT LEAST UNE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED RUW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN CULUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.000 0.001 0.000 0.000 0.001 0.376 0.365 0.154 0.277 0.338 0.384 0.386 0.381 0.346 0.353 0.357 0.140 0.253 0.310 0.355 0.335 0.351 0.321 0.323 0.324 0.228 0.281 0.304 0.314 0.319 0.289 0.285 0.287 0.203 0.272 0.281 0.238 0.096 0.219 0.253 0.250 0.252 0.215 0.213 0.149 0.203 0.217 0.176 0.152 0.166 0.172 0.175 0.134 0.135 0.116 0.136 0.093 0.127 0.132 0.137 0.079 0.033 0.063 0.087 0.000 0.093 0.093 0.091 0.092 .044 140. .048 .040 9000 1000 .048 -032 .017 10 80 0

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CULUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY

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STATION B SEPT

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DATA INPUT .637

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.133 .100 PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.000 0.000 0.000 0.000 0.000 0.000 0.001 0.001 0.216 960.0 0.182 0.208 0.214 0.217 0.218 0.218 0.219 0.219 0.195 0.198 0.199 0.199 0.200 0.197 0.198 0.201 0.201 0.149 0.178 0.179 0.180 0.180 0.077 0.178 0.179 0.177 0.181 0.157 0.158 0.068 0.158 0.159 0.159 0.160 0.157 0.160 0.161 0.059 0.135 0.136 0.136 0.137 0.138 0.139 0.139 0.137 0.138 0.139 0.115 0.115 0.115 0.116 650.0 0.110 0.114 0.116 0.117 0.117 0.117 0.094 0.095 510.0 0.089 0.094 0.039 0.093 0.093 0.093 0.094 0.095 960.0 0.092 0.095 0.071 0.071 0.072 0.030 0.059 0.068 0.070 0.071 0.070 0.072 0.073 0.071 0.072 0.072 0.049 0.039 0.046 0.048 0.048 0.048 0.049 0.020 0.047 0.048 0.048 0.048 0.049 0.049 .023 .010 .020 .024 .024 .024 .024 .024 .025 .025 450000 121

AFTER HEAVY COLUMN XX IS SINGLE SITE STARTING DAY

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CCLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY

UNCONDITIONAL PROBABILITY = .002

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                                   PROBABILITY THAT AT LEAST ONE SITE BECOMES
                                          READY AFTER WEATHER WATCH IS INSTITUTED
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STATION B DCT

INPUT DATA

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STATION B NOV

DATA INPUT .323

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.003 0.009 0.012 0.017 00000 0.004 0.007 0.014 0.001 0.414 0.576 0.703 0.724 0.736 0.749 0.760 0.661 0.743 0.766 999.0 0.686 0.698 0.706 0.382 0.622 0.717 0.133 0.348 0.497 0.579 0.643 0.655 0.669 0.675 0.621 0.663 0.687 0.681 0.693 0.312 0.117 0.452 0.594 909.0 0.614 0.620 0.626 0.638 0.531 0.572 0.632 0.644 0.275 0.403 0.538 0.550 0.569 0.102 0.477 0.517 0.558 0.564 0.575 0.581 0.349 0.085 0.235 0.417 0.455 0.475 0.486 0.493 0.499 0.505 0.510 0.516 0.069 0.193 0.419 0.425 0.291 0.351 0.384 0.403 0.413 0.430 0.435 0.440 0.329 0.339 0.227 0.305 0.335 0.148 0.277 0.320 0.344 0.348 0.242 0.035 0.102 0.158 0.194 0.215 0.227 0.234 0.238 0.248 .125 .129 .052 .082 .102 .114 .137 .121 .127 .131 .133 .135 10

HEAVY AFTER CULUMN XX IS SINGLE SITE STARTING DAY

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TE BECOMES Tituted	WATCH BEGAN Available	•	•	• 26	.63	.83	.92	96.	926.0	.98	.98	0.989	0.991	.99	66.	66.	966.0
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		9	•	.20	0.526	.74	.85	16.	0.939	.95	.96	196.0	-97	.97	.97	.98	0.984
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COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

UNCONDITIONAL PROBABILITY =. 131

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STATION B DEC

INPUT DATA .130 .031

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STATION C JAN

INPUT DATA

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.999 1.000 0.970 000-0.836 0.986 0.993 0.932 966.0 0.998 0.999 1.000 966.0 0.999 0.957 0.978 0.988 0.994 0.998 0.999 0.911 0.939 0.989 0.993 0.765 0.967 966.0 0.997 0.999 0.981 0.998 0.914 0.969 0.980 0.718 0.949 0.987 0.994 966.0 0.847 0.997 0.991 0.877 0.965 0.976 0.410 0.662 0.800 0.922 0.949 0.983 0.988 0.994 0.995 0.991 0.595 0.826 0.916 0.881 0.939 0.955 196.0 0.975 0.988 0.981 0.753 0.947 0.296 0.658 0.818 0.862 0.894 0.917 0.934 0.957 0.965 0.972 0.650 0.419 0.553 0.721 0.774 0.870 0.830 906.0 0.920 0.814 0.845 0.931 0.304 0.415 0.503 0.629 0.743 0.573 0.770 0.674 0,793 0.161 0.712 0.848 .165 .235 .429 .569 .590 .295 .463 .520 .346 .391 665. .545 てきょうらておりのほどほ

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COLUMN XX IS SINGLE SITE, STARTING DAY AFTER HEAVY RAIN

STATION C FEB

INPUT DATA

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.022 0.048 0.060 0.115 0.150 0.184 0.217 0.247 1.000 1.000 0.744 946.0 0.999 0.999 0.985 966.0 0.998 0.998 0.999 166.0 0.990 966.0 966.0 0.999 0.999 0.999 0.998 0.927 0.977 0.997 0.998 0.998 0.983 0.989 0.992 966.0 0.997 0.999 0.965 0.995 966.0 0.986 0.947 0.989 0.993 0.994 0.972 0.981 0.997 0.991 0.974 0.920 0.953 0.985 0.978 0.982 0.988 0.967 0.991 0.993 0.959 0.965 0.979 0.922 0.942 0.952 0.970 0.975 0.983 0.897 0.870 0.932 0.940 0.688 0.912 0.923 0.948 0.955 0.962 0.583 0.818 0.839 0.879 0.784 0.853 0.866 0.903 0.913 0.891 0.640 0.704 0.739 0.755 0.789 0.568 0.679 0.804 0.722 0.772 0.442 .400 .489 .343 .434 .456 .473 .540 .558 . 505 .575 .523 10

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

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PROBABILITY THAT AT LEAST ONE SITE BECOMES
                           COLUMN HEADS ARE NUMBER OF SITES AVAILABLE
       READY AFTER WEATHER WATCH IS INSTITUTED
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0.642

1.000

HEAVY

SINGLE SITE STARTING DAY AFTER

CULUMN XX IS

UNCONDITIONAL PROBABILITY =.299

0.605

1.000

0.565

1.000

1.000

0.299

1.000

1.000

0.425

1.000

0.027 0.110 0.211

1.000

1.000

0.998

STATION C MAR

INPUT -143 -018 -161

STATION C APR

INPUT DATA

•013

.167

-200

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.095 0.186 0.268 0.368 0.334 0.436 0.022 0.481 000 000 000. 000 000 • 000 000 .000 000 000 000.1 0.914 0.997 000-1 1.000 000-1 0.890 0.999 1.000 1.000 1.000 00001 0.994 1.000 1.000 0.859 0.999 0.999 1.000 1.000 1.000 0.999 0.998 1.000 000-1 000 - 1 0.999 1.000 0.999 1.000 1.000 1.000 1.000 0.820 0.495 0.998 0.997 0.982 1.000 1.000 1.000 0.999 0.995 0.999 1.000 0.66.0 966.0 0.770 0.968 0.994 0.998 1.000 0.978 0.986 0.999 0.999 1.000 0.943 0.988 0.991 0.993 0.998 0.706 966.0 1.000 0.997 0.898 0.953 996.0 0.987 0.998 0.624 966.0 0.997 0.976 0.582 966.0 0.971 0.991 0.987 0.520 0.820 0.900 0.922 0.930 0.939 0.950 0.962 0.978 0.983 0.600 0.971 0.845 0.922 0.945 0.784 0.817 0.830 0.865 0.907 0.935 0.681 0.887 0.954 .633 +99. **•69** .745 .435 909. .721 .536 .588 .802 2 11 13 3 O

CCLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION C MAY

INPUT DATA

•020

129

.226

.323

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER MATCH IS INSTITUTED

ROW MEADS ARE DAYS'SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.020 0.043 0.066 0.08B 0.109 0.128 0.147 0.165 0.183 • 0.965 0.978 0.985 0.668 0.973 0.976 0.988 0.982 0.993 0.991 0.965 0.906 0.951 196.0 0.968 0.973 0.977 0.982 0.985 0.988 0.990 0.992 0.959 0.966 946.0 0.949 0.953 0.980 0.983 0.877 0.971 0.976 0.931 0.920 0.926 0.840 0.939 0.538 0.904 0.947 0.955 0.968 0.972 0.931 0.962 0.976 0.484 0.885 0.920 0.866 0.909 0.930 0.947 0.793 0.892 0.899 0.939 0.954 0.836 0.864 0.844 0.891 0.914 0.424 0.813 0.878 0.730 0.852 0.903 0.923 0.931 0.738 0.764 0.798 0.814 0.859 0.356 0.650 0.774 0.784 0.831 0.846 0.871 0.882 0.683 0.545 0.634 0.662 0.698 0.717 0.736 0.754 0.170 0.785 0.798 0.672 0.535 0.408 0.488 0.514 0.550 0.569 0.589 0.607 0.198 0.624 0.641 0.656 .303 .310 .318 .329 .344 .285 .359 .373 .387 +14. .401

CULUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION C JUNE

INPUT DATA

.356

.067

.300

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.936 0.939 0.888 0.944 0.963 0.611 0.927 0.950 0.957 0.968 0.915 0.919 0.925 0.932 0.941 0.948 0.905 0.954 0.960 0.861 0.900 0.909 0.919 0.827 0.888 0.893 0.928 0.936 0.949 0.942 0.840 0.853 0.859 0.900 0.483 0.866 0.877 0.889 0.909 0.939 0.932 0.834 0.807 0.813 0.848 0.432 0.792 0.822 0.872 0.883 0.861 0.892 0.376 0.806 0.843 0.666 0.763 0.776 0.792 0.820 0.832 0.854 0.314 0.649 999.0 0.673 0.683 0.715 0.773 0.584 869.0 0.746 0.760 0.731 0.785 0.578 0.246 0.544 0.561 0.568 0.593 0.610 0.657 0.685 0.627 0.642 0.671 0.482 10.407 0.429 0.466 0.496 0.510 0.172 0.355 0.422 0.437 0.451 0.482 0.537 .300 060. .240 .259 .269 .280 197 .244 .250 .290 .310 .319 122 123 P = 0

0.071

0.084

0.058

0.014

0.002

0.030

0.097

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

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STATION C JULY

INPUT DATA .255

.067

-290

194 .194 PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.000 0.027 900.0 0.019 0.035 0.011 0.044 00 0.319 0.799 0.864 0.893 0.908 0-645 0.916 0.928 0.933 0.938 0.943 0.922 0.952 01 0.764 0.866 0.900 0.834 0.883 0.893 906.0 0.918 0.912 0.930 0.924 0.607 0.833 0.564 0.723 0.797 0.851 0.862 0.871 0.878 0.885 0.892 0.839 906.0 0.753 0.849 0.675 0.791 0.824 0.833 0.857 0.866 0.811 0.841 0.463 0.618 0.698 0.739 0.760 0.774 0.784 0.793 0.803 0.812 0.821 0.830 0.552 0.710 0.405 0.673 969.0 0.631 0.721 0.731 0.741 0.751 191.0 0.339 0.629 0.651 0.474 0.550 0.640 0.614 0.661 0.682 0.142 0.693 0.591 0.671 0.109 0.382 0.450 0.489 0.525 0.535 0.545 0.556 0.566 0.267 0.511 0.577 0.587 0.436 0.379 0.400 0.275 0.329 0.409 0.074 0.361 0.391 0.418 0.427 9*4.0 0.187 .200 .220 .226 .098 941. .212 .237 .243 .256 .038 .181 .231 .249 10 12 4 1 9 - 40

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY

STATION C AUG

INPUT DATA

.093

.226

161.

161.

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

RUW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.005 0.002 0.010 0.016 0.029 0.035 0.041 0.022 0.630 0.767 0.823 0.849 0.862 0.898 0.878 0.885 0.871 0.891 0.904 0.818 0.591 0.790 0.832 0.849 0.857 0.864 0.842 0.814 0.806 0.549 0.688 0.750 0.780 0.795 0.838 0.830 0.703 0.779 0.734 0.751 0.788 0.797 0.761 0.771 0.707 0.449 0.582 0.647 0.678 969.0 0.745 0.755 0.717 0.175 0.580 0.612 0.629 099.0 0.670 0.680 0.517 0.690 0.392 0.641 0.651 0.559 0.500 0.569 0.578 0.598 909.0 0.328 0.531 0.548 0.588 0.441 0.258 0.354 904.0 0.433 0.486 0.448 0.459 0.468 0.477 0.495 0.336 0.358 0.366 0.180 0.293 0.343 0.327 0.351 0.315 .190 661. • 095 .135 .159 .204 .172 .209 .180 .185 194 ~ @ J 10

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION C SEPT

INPUT DATA .455

-045 .167

.133 -200 PROBABILITY THAT AT LEAST ONE SITE BECOMES IS INSTITUTED READY AFTER WEATHER WATCH ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.548 0.626 0.335 0.307 0.511 0.588 0.545 0.471 0.427 0.151 0.078 0.147 •076 .040

0.544 0.550 0.534 0.539 0.480 0.490 0.446 0.470 0.485 0.495 0.429 0.425 0.420 0.411 0.345 0.358 0.325 0.353 0.362 0.279 0.286 0.282 0.179 0.196 0.198 0.191 0.201 •106 .101 •105 .103 ***60**

0.435 0.440 0.446 0.366 0.371 0.376 0.381 0.391 0.290 0.294 0.298 0.204 0.207 0.210 .108 1111. .117 .110 11213 0 ~ 00 0 01

HEAVY AFTER SINGLE SITE STARTING DAY

0.396

0.017

0.007 0.009

0.680 0.686 0.693

0.642 0.648 0.654

0.598 0.605

0.611 0.617

0.556

0.507

0.501

0.568

0.674

0.636

0.593

0.011 0.013 0.015

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0.705

0.667 0.661

0.624

0.519

0.003 0.005

0.669

0.001

0.664

0.625 0.631

0.582 0.587

0.653

0.615

STATION C DCT

INPUT DATA

•606

160.

.097

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.388 0.389 0.385 0.396 0.391 0.394 0.398 0.401 0.359 0.363 0.369 0.355 0.317 0.347 0.357 0.367 0.325 0.326 C.328 0.334 0.336 0.322 0.330 0.332 0.294 0.289 0.257 0.291 0.292 0.299 0.303 0.305 0.297 0.301 0.258 0.253 0.255 0.256 0.146 0.247 0.261 0.263 0.264 0.266 0.268 0.220 0.219 0.223 0.224 0.211 0.216 0.217 0.227 0.191 0.177 0.178 0.179 0.180 0.183 0.185 0.181 0.136 0.137 0.138 0.139 0.140 0.132 0.138 0.143 0.119 0.141 0.142 0.093 0.000 960.0 0.094 0.095 0.095 0.098 0.099 0.097 0.051 0.081 0.097 640. .048 .048 •040 .050 .046 .047 .048 .050 .050 •051 12

0.001

0.002 0.002 0.003

0.002

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

XX

0.202 0.202 0.203 0.203

HEAVY

AFTER

COLUMN XX IS SINGLE SITE STARTING DAY

UNCONDITIONAL PROBABILITY =.000

0.201

0.198

0.200

0.166

0.191

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0.183
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                                                   PROBABILITY THAT AT LEAST ONE SITE BECOMES
                                                           WEATHER WATCH IS INSTITUTED
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STATION C NOV

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INPUT DATA .450 .034 .290 160.

.129

STATION C DEC

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

WATCH BEGAN RUW HEADS ARE DAYS SINCE WEATHER WATCH BEG/ COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.000 00000 0.001 0.002 0.003 0.002 0.001 0.002 0.50 0.369 0.427 0.154 0.408 0.436 0.449 0.454 0.441 9444 0.447 0.456 0.459 0.451 0.376 0.266 0.339 0.394 0.403 0.408 0.410 0.413 0.415 0.417 0.420 0.422 0.379 0.240 0.343 0.360 0.368 0.126 0.372 0.375 0.377 0.381 0.383 0.323 0.334 0.337 0.339 0.275 0.307 0.330 0.343 0.214 0.341 0.345 0.347 0.111 960.0 0.241 0.270 0.284 0.297 0.299 0.295 0.302 0.291 0.301 0.243 0.256 U-158 0.206 0.231 0.249 0.252 0.254 0.065 0.205 0.208 0.168 0.189 0.200 0.209 0.212 0.211 0.049 0.154 0.146 0.158 0.160 0.163 0.165 0.161 0.164 0.100 0.105 0.110 0.112 0.113 0.033 0.088 0.108 0.066 0.111 0.112 •050 .057 .058 .059 .017 .058 .057 .057 .034 -045 .051 .054 .056 10 12 13

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY

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                    ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE
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LEAST UNE SITE BECOMES
                           AVAILABLE
      READY AFTER WEATHER WATCH IS INSTITUTED
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PROBABILITY THAT AT
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HEAVY

AFTER

STARTING DAY

SINGLE SITE

COLUMN XX 15

UNCONDITIONAL PROBABILITY =.682

STATION D JAN

INPUT

.028 .020 .355

-245 .355 ×

STATION D FEB

DATA INPUT *00

.232

.010

.250

494-

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

1.000 1.000 0.999 1.000 1.000 0.998 1.000 1.000 1.000 1.000 0.997 1.000 1.000 0.986 0.999 1.000 1.000 1.000 0.998 0.972 0.943 0.998 0.992 0.973 0.991 0.909 0.971 0.762 969. .512 .788 .828

1.000 1.000 1.000 0.999 • 000 000 0.999 166.0 0.999 0.995 0.998 0.982 0.977 0.987 198. .849 .887 400-60

0.272 0.119

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1.000

1.000

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0.430 0.561

1.000

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0.658

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RAIN HEAVY AFTER SINGLE SITE STARTING DAY

1%PUT DATA -058 -007 -451 -065

STATION D MAR

PRUBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.270 0.049 0.110 0.187 0.353 0.430 0.497 0.557 0.608 1.000 1.000 1.000 0.855 0.989 0.999 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 0.983 0.998 1.000 1.000 1.000 0000 0000 • 000 .000 000 0.999 0.973 1.000 0.787 0.997 1.000 1.000 1.000 0.993 000 0.999 1.000 000-1 0.958 1.000 1.000 1.000 0.997 0.999 1.000 1.000 1.000 1.000 0.933 0.986 1.000 1.000 1.000 0.999 0.999 000 1.000 000 0.619 0.895 0.972 0.998 1.000 0.997 166.0 1.000 0.989 0.836 0.943 0.978 0.994 966.0 0.997 0.998 0.999 0.999 1.000 1.000 0.998 0.989 0.440 0.883 0.979 966.0 0.742 0.942 0.967 0.985 0.992 0.995 0.997 0.320 0.850 0.939 0.959 0.595 0.923 0.950 0.966 0.897 0.986 0.973 0.978 0.761 .680 .835 .852 .613 .722 .752 .776 . 797 .363 .816 10 111

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION D MAR

INPUT DATA

.451

.065

PRUBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.167 0.353 0.430 0.608 0.652 0.497 0.557 1.000 1.000 0.999 1.000 1.000 1.000 1.000 1.000 0.989 1.000 1.000 0.855 1.000 1.000 1.000 1.000 1.000 0.824 0.983 1.000 1.000 1.000 1.000 1.000 0.998 1.000 1.000 1.000 1.000 1.000 0.999 0.973 1.000 1.000 1.000 0.997 1.000 0.999 1.000 1.000 1.000 0.993 0.958 1.000 1.000 1.000 0.741 1.000 000 000 0.986 0.999 1.000 • 000 0.933 1.000 0.686 1.000 1.000 0.999 1.000 1.000 0.998 0.999 1.000 1.000 0.895 0.972 166.0 0.997 1.000 1.000 0.943 0.978 0.994 0.999 0.999 1.000 0.989 966.0 0.998 0.997 0.942 0.979 0.989 0.742 0.883 0.985 0.995 0.967 0.994 0.997 0.992 0.923 0.850 0.939 0.950 0.897 0.959 0.973 0.595 0.966 0.978 0.761 .680 .722 .752 .835 .868 .613 .776 197 .852 .816

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION D APR

INPUT DATA

-005

.533

191.

PROBABILITY THAT AT LEAST ONE SITE BECOMES RFADY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.051 0.008 0.015 0.067 0.025 0.037 0.001 0.899 0.995 0.600 0.789 0.948 0.992 0.993 0.987 966.0 0.971 196.0 0.753 0.533 0.930 0.980 0.987 0.989 0.872 0.958 0.972 0.991 0.959 0.712 0.840 906.0 0.979 0.941 0.975 0.491 0.447 0.663 0.798 0.874 0.916 0.939 0.952 0.960 0.966 0.973 0.979 0.909 0.398 0.880 0.926 0.951 0.607 0.747 0.937 0.955 0.831 0.945 0.829 0.864 0.886 0.345 0.682 0.925 0.773 0.900 0.911 0.918 0.936 0.865 0.797 0.463 0.107 0.287 0.600 969.0 0.756 0.824 0.855 0.842 0.589 0.497 0.653 0.765 0.373 0.698 0.749 0.798 0.603 0.656 0.550 0.580 0.619 0.645 0.267 0.367 0.447 0.507 0.633 0.667 .205 .256 .329 .383 .081 .394 404 .144 .298 .370

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION D MAY

INPUT DATA .454

.290 -062

.032

191.

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED ROW MEADS ARE DAYS SINCE WEATHER WATCH BEGAN CULUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.001 0.002 0.003 0.003 0.004 00000 0.002 0.001 0.433 0.488 0.231 0.367 0.463 0.477 0.484 0.491 964.0 0.497 0.503 0.399 0.453 0.459 0.337 0.428 0.442 0.449 0.456 194.0 0.464 195.0 0.306 0.364 0.392 0.405 0.415 0.418 0.420 0.423 0.426 0.428 0.411 0.274 0.327 0.365 0.377 0.353 0.380 0.389 0.371 0.374 0.387 0.382 0.384 0.146 0.240 0.288 0.334 0.336 0.322 0.328 0.338 0.340 0.311 0.342 0.331 0.289 0.204 0.247 0.267 0.277 0.282 0.285 0.287 0.293 0.295 0.291 0.297 0.203 0.233 0.235 0.239 0.240 0.242 0.100 0.228 0.237 0.167 0.180 0.184 0.185 0.188 0.182 0.076 0.186 0.177 0.129 0.107 0.124 0.125 0.126 0.127 0.128 0.051 0.087 0.117 .067 190-090 •063 •064 •065 .055 •065 990. 990. .068

HEAVY AFTER COLUMN XX IS SINGLE SITE STARTING DAY

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STATION D JUNE

INPUT DATA .073 .594

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.179 0.147 0.176 0.180 960.0 0.180 0.181 0.181 0.160 0.163 0.162 0.164 0.164 0.165 0.143 0.136 9+1.0 0.147 0.147 0.148 0.147 0.130 0.130 0.105 0.120 0.126 0.129 0.131 0.059 0.109 0.091 0.104 0.113 0.113 0.113 0.111 0.112 0.076 0.094 0.095 0.088 0.092 0.095 0.094 0.095 0.039 0.074 0.076 0.076 0.077 0.071 0.077 0.077 0.061 0.046 0.054 0.056 0.058 0.058 0.058 0.030 0.057 0.058 0.039 0.036 0.038 0.039 0.039 0.039 0.039 0.020 0.031 .020 .016 •100 .020 .018 .020 .010 .019 .020 9 8

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HEAVY

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COLUMN XX IS SINGLE SITE STARTING DAY

STATION D JULY

DATA INPUT .758

.048 -065 .032 160.

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.119 0.119 0.119 0.000 0.114 0.118 0.119 0.120 0.120 0.120 0.120 0.103 0.108 0.108 0.108 0.109 0.109 0.109 0.109 0.107 0.108 0.108 0.108 960.0 0.073 960.0 0.097 0.092 0.097 0.097 0.097 0.097 0.097 0.097 0.097 0.097 0.085 0.085 0.085 0.085 0.085 0.085 0.086 0.086 0.086 0.086 0.073 0.074 0.074 0.074 0.055 0.070 0.073 0.074 0.073 0.073 0.074 0.074 0.074 0.046 0.059 0.061 190.0 0.061 0.062 0.062 0.062 0.062 0.062 0.062 0.062 0.062 0.047 0.049 0.049 0.050 0.050 0.050 0.050 0.050 0.050 0.050 0.037 0.050 0.050 0.037 0.036 0.037 0.038 0.028 0.037 0.037 0.037 0.037 0.038 0.038 0.038 0.038 0.038 0.019 0.024 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 .013 -012 .013 600. .012 .013 .013 .013 .013 .013 .013 .013 .013 112 9 ~ 3 6 2

CULUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY

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STATION D AUG

INPUT DATA .651

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191.

.129 -032 PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.054 0.010 0.045 0.054 0.054 0.032 0.053 0.054 0.054 0.054 0.051 0.054 0.054 0.054 0.049 0.049 6+0-0 0.029 0.046 0.048 0.048 0.049 0.049 0.049 0.041 0.043 0.043 0.026 0.036 0.043 0.043 0.043 0.043 0.041 0.043 0.043 0.043 0.038 0.038 0.038 0.036 0.038 0.038 0.038 0.058 0.022 0.032 0.037 0.038 0.019 0.027 0.031 0.032 0.033 0.033 0.033 0.033 0.033 0.033 0.033 0.027 0.016 0.023 0.026 0.027 0.027 0.027 0.027 0.005 0.027 0.027 0.027 0.013 0.018 0.021 0.022 0.022 0.022 0.022 0.022 0.022 0.022 0.022 0.016 0.014 0.016 0.016 0.016 0.016 0.016 0.003 0.010 0.016 0.017 0.017 0.017 0.009 0.010 0.002 900.0 0.011 0.011 0.011 0.011 0.011 0.011 0.011 0.011 0.011 .003 • 005 • 005 .005 900. •000 •000 900. 900. .005 110 5 9~ 30 0

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> HEAVY AFTER STARTING DAY COLUMN XX IS SINGLE SITE

STATION D SEPT

INPUT DATA

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PROBABILITY THAT AT LEAST ONE SITE BECOMES RFADY AFTER WEATHER WATCH IS INSTITUTED

ROW MEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.150 0.157 0.155 0.156 0.156 0.156 960.0 0.137 0.157 0.157 0.157 0.157 0.143 0.141 0.142 0.142 0.086 0.136 0-140 0.141 0.142 0.142 0.143 0.143 0.126 0.127 0.125 0.127 0.128 0.127 0.112 0.112 0.112 0.112 0.113 0.068 0.096 0.096 0.097 0.097 0.097 0.059 0.085 0.093 0.097 0.097 0.098 0.098 0.049 0.078 0.080 0.082 0.081 0.082 0.082 0.082 0.071 0.081 0.081 0.081 0.082 0.065 990.0 0.039 0.065 990-0 0.057 0.063 990-0 990.0 990.0 990.0 0.066 0.049 0.050 0.050 0.043 0.048 0.049 0.050 0.050 0.050 0.000 0.050 0.030 0.050 0.050 0.020 0.029 0.032 0.033 0.033 0.033 0.033 0.033 0.033 0.034 0.034 0.034 0.034 0.034 .010 .017 .017 .017 .015 .017 .017 .016 .017 .017 .017 .017 .017 13 80 10 11

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COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION & OCT

INPUT DATA .360

419 .027

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.003 0.000 0.000 0.002 0.001 0.001 0.002 0.004 0.154 0.299 0.396 0.456 0.539 0.530 0.535 0.523 0.542 0.545 0.491 0.511 0.551 0.486 0.505 0.498 0.140 0.365 0.455 0.475 0.493 0.502 0.447 0.458 0.332 0.385 0.417 0.436 0.465 0.247 0.468 0.297 0.394 0.347 0.377 0.404 0.415 0.418 0.411 0.421 0.427 0.349 0.359 0.365 0.369 960.0 0.333 0.372 0.306 0.192 0.261 0.301 0.286 0.162 0.262 0.315 0.309 0.318 0.321 0.328 0.183 0.249 0.256 0.270 0.065 0.216 0.266 0.132 0.237 0.261 0.264 0.268 0.167 0.183 0.203 0.140 0.193 0.199 0.205 0.209 0.207 0.101 0.211 0.133 0.140 0.115 0.126 960.0 0.138 0.143 990-0 0.142 0.147 .059 .049 •076 .017 .035 •065 690. 170. .073 .074 .075 .076 .075 121

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY

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.270 .063 .334 .200 PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

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10			454	603	702	755	783	661	910	817	823	829	835	840	
6		148	391	565	499	718	0.747	764	775	783	190	196	802	808	814
80	•	0.133	0.357	0.523	0.621	0.675	0.706	0.723	0.735	0.743	0.750	0.757	0.763	0.770	0.776
1							0.657								
•		102	282	426	211	570	0.600	619	630	639	949	653	099	199	719
S	0.	0.085	0.241	0.370	0.454	0.505	0.534	0.552	0.564	0.572	0.579	0.586	0.593	0.600	0.608
4							0.457								
m		250	152	242	305	344	0.368	385	392	366	402	411	417	423	459
2	•	0.035	0.104	0.169	0.215	0.245	0.263	0.275	0.282	0.288	0.293	0.298	0.302	0.307	0.312
-	•	.018	.054	.088	.114	.131	-145	.146	.153	156	.159	.162	.165	.168	1111
	-	?	~	4	\$	•	1	30	σ	2	7	12	13	14	15

STATION D DEC

INPUT DATA

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.105 0.158 0.215 0.333 0.030 0.002 0.011 .. 1.000 1.000 1.000 0.999 0.903 166.0 1.000 1.000 1.000 1.000 1.000 0.585 0.983 1.0000 1.0000 1.0000 .000 0.877 0.995 0.974 0.999 000 1.000 000 • 1 00001 0.845 0.999 1.000 000-1 • 000 0.962 166.0 0.998 1.000 1.000 1.000 1.000 0.995 0.999 1.000 0.805 0.998 0.942 0.989 0.998 0.999 0.410 0.913 0.996 0.999 1.000 0.999 1.000 0.999 1.000 0.999 1.000 0.971 0.947 0.977 0.989 0.870 0.998 966.0 0.997 0.998 0.804 0.296 0.905 0.989 0.951 0.994 0.973 0.984 966.0 0.607 0.992 0.997 0.705 0.828 0.934 0.989 0.503 0.897 0.954 976.0 0.979 0.983 0.967 0.987 0.935 0.373 0.557 0.780 0.836 0.872 0.896 0.913 0.925 169.0 0.951 .208 .335 444. .595 .643 .678 .704 .726 .745 .531 .762 10 9 M 8 G

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

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STATION E JAN

DATA INPUT .132

-417 .161

.129

ONE SITE BECOMES RFADY AFTER WEATHER WATCH IS INSTITUTED LEAST PROBABILITY THAT AT

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.002 0.004 0.011 0.016 0.022 0.028 0.007 0.001 •• 0.460 0.604 0.877 0.695 0.755 0.796 0.825 0.547 0.864 0.888 0.897 0.913 0.566 0.815 0.718 0.848 0.860 0.792 0.833 0.761 0.871 0.613 0.389 0.675 0.720 0.752 0.777 0.797 0.813 0.826 0.838 0.626 0.731 0.769 0.564 0.705 0.797 0.351 0.477 0.671 0.752 0.427 0.649 0.676 0.309 0.510 0.570 0.615 0.715 169.0 0.745 0.609 0.649 0.679 0.448 0.505 0.548 0.665 0.265 0.371 0.582 0.631 0.692 0.410 0.219 0.310 0.430 0.502 0.597 0.378 0.528 0.549 0.567 0.583 0.300 0.430 0.169 0.243 0.344 0.379 0.450 0.467 0.455 0.507 0.407 0.051 0.313 0.169 0.211 0.245 0.272 0.294 0.329 0.342 .089 .189 .147 .160 961. .203 090-181. .210 .131 .171 12 13 35 0 P 20 5

HEAVY AFTER STARTING DAY SINGLE COLUMN XX IS

STATION E FEB

INPUT .318

.039 .357

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.009 0.004 0.002 0.007 0.015 0.018 0.643 0.746 0.789 0.765 0.776 0.711 0.783 0.795 0.673 0.605 0.739 0.747 0.754 0.760 0.728 0.630 0.562 999.0 0.686 0.719 0.706 0.712 0.697 0.664 0.649 0.395 0.617 0.637 0.657 0.683 0.670 0.690 0.581 0.677 195.0 0.525 0.561 0.580 0.592 0.600 0.607 0.614 0.177 0.620 0.534 0.547 0.150 0.403 964.0 0.541 0.560 0.462 0.515 0.457 994.0 0.470 0.476 0.122 0.249 0.391 0.422 0.439 0.450 0.482 0.373 0.266 0.193 0.352 0.368 0.384 0.093 0.337 0.361 0.186 0.268 0.134 0.240 0.263 0.258 0.063 0.251 .098 .128 .135 .139 -142 .144 .149 141.

AFTER HEAVY COLUMN XX IS SINGLE SITE STARTING DAY

STATION E MAR

INPUT DATA

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191.

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.003 0.004 0.007 0.010 0.013 0.016 0.001 0 0.609 0.879 0.708 0.838 0.856 0.869 0.771 0.811 0.806 0.670 0.840 0.850 0.570 0.777 0.865 0.627 0.788 0.815 0.693 0.737 0.767 0.803 0.832 0.644 0.578 0.689 0.720 0.743 0.759 0.190 0.797 0.771 999.0 0.745 0.430 0.522 0.688 0.705 0.718 0.587 0.632 0.260 0.460 0.566 0.522 0.672 0.598 0.621 0.638 0.652 0.662 0.389 9550 0.590 0.100 0.313 0.517 0.540 0.557 0.570 0.487 0.309 0.166 0.245 0.394 0.421 0.469 0.357 0.457 0.487 0.495 0.441 0.218 0.255 0.284 0.305 0.344 0.171 0.321 .059 060. 116 .176 .154 991. .184 .190 •195 .200 .137 9 ~ 30

CCLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

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Ä	•	0.2	0.5	0.6	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	998-0
6	•	0.225		0.632											
œ			441	589	199	108	731	744	154	762	691	176	783	161	198
1	0.	0.180	0.399	0.540	0.618	0.659	0.683	769.0	0.707	0.715	0.723	0.730	0.738	0.745	0.753
•			354	486	195	603	979	940	920	629	199	675	683	169	869
S	•	0.132	0.305	0.426	0.497	0.537	0.559	0.574	0.584	0.592	0.600	0.608	0.616	0.624	0.632
4	•	0.107	0.252	0.359	0.423	0.460	0.481	0.494	0.504	0.512	0.519	0.527	0.535	0.542	0.550
m	•	0.081	0.196	0.283	0.338	0.370	0.389	0.400	604.0	0.416	0.423	0.430	0.437	554.0	0.451
8	•	0.055	0.135	0.199	0.240	0.265	0.280	0.289	0.296	0.301	0.307	0.312	0.318	0.324	0.329
-	•	.028	.070	•105	.128	.143	151.	.157	.161	.164	.167	171.	1174	.178	.181
		~	~	5	~	9	2	30	5	10	11	12	13	71	15

CULUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION E HAY

INPUT DATA

.323

194

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.009 0.019 0.614 0.861 969.0 0.778 0.817 0.837 0.848 0.855 0.816 0.824 0.783 0.804 0.742 0.837 0.657 0.831 0.614 0.700 0.794 0.743 0.766 0.778 0.800 0.787 0.807 0.565 969.0 0.719 0.749 0.407 0.651 0.732 0.741 0.663 0.595 0.686 0.510 0.639 0.677 0.694 0.361 0.701 0.572 0.529 0.596 0.635 0.448 0.610 0.619 0.627 0.659 0.311 0.258 0.516 0.529 0.538 0.379 0.546 0.452 0.493 0.363 0.450 0.454 0.200 0.300 0.399 0.447 0.431 0.440 194.0 0.332 0.139 0.260 0.304 0.288 0.314 0.326 0.212 0.320 0.337 .176 .140 .166 .179 .172 .182 .186 .190 112

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION E JUNE

INPUT DATA

.178

-167 -167 PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.555 0.860 0.976 0.959 0.971 0.974 0.911 0.937 0.964 0.968 0.979 0.951 0.719 0.830 0.887 0.944 0.950 0.959 0.517 0.917 0.934 0.955 0.962 0.793 0.856 0.930 0.477 0.677 0.910 0.922 0.936 946.0 0.950 0.891 0.941 0.954 0.433 0.628 0.816 0.879 0.910 0.180 0.748 0.856 0.893 0.903 0.922 0.916 0.927 0,385 669.0 0.766 0.810 0.836 0.853 0.864 0.873 0.894 0.571 0.881 0.887 0.333 0.626 0.830 0.846 0.702 0.749 0.778 0.797 0.811 0.838 0.853 0.821 0.776 0.277 0.431 0.545 0.669 0.700 0.736 0.748 0.107 0.620 0.721 0.757 0.767 0.216 0.345 9*4.0 0.595 0.654 0.516 0.564 0.616 0.664 0.684 0.081 0.632 0.644 0.472 0.055 0.325 0.453 0.150 0.246 0.425 0.498 0.508 0.384 0.517 .028 .078 .179 .260 .273 .283 .298 .305 -132 .215 -242 .312 162. 110 9 ~ 8 6

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COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

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STATION E JULY

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

.129

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

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10		154	325	09	555	919	199	689	601	122	132	0.740	146	152	157
6												0.703 0			
00		126	270	389	476	537	579	209	627	641	652	0.660	999	672	119
1		111	241	350	432	064	531	655	578	265	603	0.611	617	623	628
•												0.554 (
5		080	179	265	333	382	418	443	460	473	483	0.490	964	505	201
4		590	146	218	276	320	351	373	389	401	410	0.417	422	427	435
æ		640	111	169	215	251	277	967	309	319	327	0.333	337	342	345
2		033	910	116	149	175	194	208	516	226	232	0.236	240	243	246
-	•	.017	.039	090	.078	260.	105	110	.116	.120	.124	.126	.128	.130	.132
	-	7	3	4	S	9	1	Œ	0	10	11	12	13	14	15

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION E AUG

DATA INPUT .316

614. .039

.129

160.

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.001 0.002 0.090 0.470 0.523 0.549 0.503 6.418 0.543 194.0 0.436 0.498 0.486 0.506 0.511 0.399 0.466 0.352 0.458 0.428 0.447 0.471 0.475 0.359 0.387 0.404 0.427 0.415 0.431 0.422 0.359 0.278 0.343 0.375 0.380 0.317 0.318 0.336 0.186 0.295 0.309 0.328 0.237 0.272 0.324 0.273 0.152 0.195 0.225 0.244 0.256 960.0 0.264 0.269 0.212 0.174 0.073 0.189 0.199 0.205 0.116 0.150 0.210 0.079 0.119 0.103 0.130 0.049 0.145 0.138 0.142 0.149 0.147 0.151 .040 .053 .025 •062 .068 .074 •075 .078 .077 .071 .079 .077 110 4 • 30 0

AFTER HEAVY COLUMN XX IS SINGLE SITE STARTING DAY

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INPUT DATA -490 -010 -233 -100 PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW MEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.556 0.412 0.515 0.526 0.486 0.534 0.538 0.545 0.549 0.553 0.531 0.541 0.450 0.489 0.478 964.0 0.497 0.504 0.508 0.501 0.515 0.511 0.450 0.461 0.346 0.413 0.439 0.457 0.467 994.0 0.475 0.471 0.311 0.407 0.180 0.414 0.417 0.372 0.397 0.424 0.411 0.421 0.368 0.352 0.361 0.365 0.374 0.377 0.380 0.383 0.233 0.315 0.320 0.325 0.132 0.303 0.318 0.323 0.311 0.331 0.234 0.107 0.258 0.263 0.266 0.268 0.270 0.273 161.0 0.251 0.261 0.181 0.195 0.201 0.207 0.209 0.214 0.081 0.203 0.205 0.210 0.212 0.147 0.143 0.147 0.125 0.139 0.140 0.149 0.055 0.135 0.101 0.144 0.146 0.142 •073 .077 .052 .074 .075 **.**064 .072 .074 .076 .077 .079 .078 .070 13 13 9 ~ 8 6

0.002

0.001

0.003

0.004

0.000

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED INPUT DATA .632 .013 • 065 .290

STATION E OCT

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.007 0.005 690.0 0.013 0.015 0.018 0.020 0.011 0.659 0.585 0.653 0.654 0.667 0.674 0.688 0.695 0.651 0.708 0.681 0.701 0.620 0.614 0.615 0.628 0.635 0.649 0.612 0.643 0.656 0.663 0.670 0.569 0.599 0.613 0.585 0.592 0.620 0.626 0.571 0.572 0.577 0.459 0.524 0.529 0.536 0.544 0.558 0.564 0.551 0.571 0.490 0.410 0.468 0.470 0.483 0.509 0.475 965-0 0.503 0.516 0.471 0.423 0.355 604.0 0.416 0.429 0.411 0.412 0.435 0.454 0.459 0.448 0.441 0.343 0.345 0.383 0.389 0.296 0.346 0.350 0.355 0.367 0.372 0.378 0.361 0.273 0.276 0.295 0.300 0.286 0.290 0.304 0.309 0.232 0.271 0.272 0.281 161.0 0.204 0.208 0.190 0.193 0.197 0.201 0.161 0.191 0.211 .110 .104 106 .108 .084 100 .101 .102 100 10 12 9 00

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY

STATION E NOV

INPUT DATA

.021

.133

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.001 0.206 0.205 0.205 0.206 0.208 0.209 0.207 0.207 0.187 0.186 0.188 0.189 0.189 0.163 0.187 0.188 0.190 0.167 0.168 0.168 0.169 0.169 0.170 0.170 0.168 0.145 0.148 0.149 0.149 0.150 0.150 0.148 0.149 0.151 0.151 0.129 0.125 0.129 0.129 0.129 0.130 0.131 0.059 0.128 0.130 0.131 0.109 0.109 0.109 0.108 0.108 0.110 0.110 0.088 0.039 0.088 0.089 0.089 0.089 0.089 0.076 0.085 0.087 0.088 0.088 0.030 0.065 0.066 990.0 0.067 190.0 0.067 0.068 0.057 0.067 0.067 0.068 0.045 0.045 0.045 0.045 0.045 0.045 0.046 0.020 0.039 0.044 0.045 0.046 .023 .023 .023 .023 .023 .023 .023 .023 .022 .023 110 6 2 8 0

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

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DATA INPUT .607

.039 191-

-032

191-

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.000 0.001 0.001 0.002 0.002 0.001 0.357 0.352 0.355 0.358 0.360 0.363 0.365 0.366 0.317 0.368 0.369 0.361 0.335 0.328 0.329 0.332 0.334 0.331 0.337 0.286 0.263 0.293 0.296 0.299 0.300 0.304 0.303 0.297 0.301 0.262 0.264 0.266 0.268 0.269 0.267 0.235 0.236 0.238 0.237 0.195 0.199 0.200 0.174 0.190 0.198 0.201 0.203 0.197 0.202 0.142 0.155 0.159 0.162 0.163 0.163 0.164 0.165 0.166 0.167 0.161 0.119 0.125 0.122 0.124 0.125 0.126 0.108 0.123 0.127 0.127 0.086 0.084 0.086 0.083 0.085 0.085 0.073 0.084 0.081 0.051 .043 .043 .044 *10. -045 .043 **0. +00. 212212 9 - 8 6

HEAVY AFTER COLUMN XX IS SINGLE SITE STARTING DAY

INPUT DATA
-066
-321
-420
-032

STATION F JAN

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.009 0.013 0.018 0.024 0.000 0.003 0.005 0.001 0.720 0.794 906.0 0.957 0.845 0.880 0.924 0.938 0.949 0.451 0.611 0.759 0.813 0.880 0.682 0.902 0.918 0.852 0.931 0.849 0.530 0.639 0.775 0.873 0.717 0.817 0.907 0.919 0.892 0.590 0.483 0.669 0.728 908.0 0.889 0.774 0.836 0.857 0.612 0.534 0.673 0.720 0.146 0.302 0.432 0.757 0.787 0.811 0.259 0.376 0.471 0.546 909.0 0.654 0.693 0.725 0.773 0.808 0.751 0.792 0.399 0.671 0.213 0.314 0.468 0.525 0.572 0.611 0.644 0,695 0.539 0.566 0.428 0.610 0.076 0.165 0.317 0.471 0.247 0.377 0.507 0.051 0.225 0.376 0.403 0.346 0.427 0.448 0.271 0.311 0.172 .120 .170 .257 .270 .210 .243 060. .227 .146 191 2222 •

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

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1NPUT DATA ...261 ...076 ...375 ...107

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.001 0.002 0.005 0.008 0.015 0.011 0.670 0.278 0.748 0.190 0.815 0.829 0.839 0.847 0.853 0.859 0.876 0.755 0.796 0.807 0.815 0.829 0.822 0.631 0.781 0.714 0.198 0.229 0.448 0.668 0.740 0.757 0.768 0.792 0.777 0.785 0.805 0.710 0.619 0.665 0.693 0.204 0.405 0.731 0.739 0.747 999.0 0.676 0.562 0.608 0.636 0.654 0.684 0.699 0.177 0.360 0.692 0.707 0.498 0.599 0.633 0.425 0.569 0.625 0.640 0.150 0.587 0.542 0.609 0.617 0.465 0.519 0.559 0.257 0.358 0.424 0.490 0.536 0.544 0.122 0.507 0.528 0.551 0.283 0.339 0.412 0.430 0.438 0.445 0.452 0.374 0.458 0.093 0.397 0.422 0.298 0.306 0.313 0.286 0.138 0.199 0.268 0.319 0.324 0.241 0.330 0.336 .145 .155 .181 .072 .105 .129 -162 167 171. .178 -185 .175 112 45 9 ~ 20

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION F MAR

INPUT DATA

-452

+111.

191.

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER MEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.558 0.765 0.688 0.719 0.740 0.638 0.599 0.649 0.396 0.521 0.681 0.702 0.717 0.728 0.736 0.743 0.675 0.189 0.480 909-0 0.686 0.557 0.638 0.660 969.0 0.361 0.701 0.435 0.653 0.589 0.610 0.626 0.659 0.509 0.645 0.168 0.557 0.637 0.569 0.589 0.596 0.146 0.285 0.387 0.457 0.503 0.533 0.554 0.580 0.602 0.530 0.515 0.523 0.244 0.335 0.490 0.504 0.123 0.398 0.441 0.410 0.536 0.542 0.372 0.453 0.417 0.430 0.439 0.279 0.398 0.447 0.459 0.465 0.100 0.201 0.334 0.364 0.217 0.344 0.359 0.369 0.076 0.155 0.263 0.295 0.317 0.332 0.352 0.184 0.224 0.236 0.245 0.256 0.265 0.106 0.208 0.251 0.151 0.261 .126 .078 .110 .131 .135 .138 •140 .097 .142 .119 .145 13 12 12 9 σ

0.000 0.002 0.002 0.004 0.005

0.009

0.011

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

UNCONDITIONAL PROBABILITY =.007

113

0.000

0.002 0.005 0.008 0.012 0.016 0.021 0.026 0.030

0.836 0.852

0.765 0.783

0.718 0.738 0.751 0.760 0.768

0.863 0.870

0.832

0.796

969.0

0.682

0.615 0.629

0.706

0.640

0.715

0.648 0.656

0.821

0.876

0.848 0.854 0.860 0.866

0.812

0.841

0.805

0.882 0.887 0.892 0.897

0.819

0.826

0.664

0.672 0.680

0.832

0.871

0.001

STATION F APR

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DATA INPUT .246

.054

400 .133

167

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.670 0.809 0.760 0.505 0.246 0.469 0.225 0.723 0.774 0.803 0.631 0.588 0.203 0.431 0.734 0.681 0.539 0.180 0.389 0.632 0.686 0.156 0.345 0.485 0.575 0.629 0.662 0.132 0.425 0.595 0.510 0.563 0.245 0.358 0.435 0.107 184.0 0.348 0.190 0.283 0.391 0.081 0.131 0.055 0.199 0.248 0.282 .028 .105 .133 .068 .152 45

0.515 0.534 0.548 0.419 0.436 0.318 0.303 .165 .174

0.449 0.458 0.335 0.328 .180 .185 10 10 12 13 9 ~ 8 6

0.558 0.567 0.575 0.582 0.590 0.598 0.473 0.480 0.466 0.488 0.495 0.366 0.342 0.348 0.354 0.360 .189 •196 .192 .200

RAIN HEAVY AFTER COLUMN XX IS SINGLE SITE STARTING DAY

STATION F MAY

INPUT DATA

.026

.323

.226

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.019 0.003 0.048 0.055 0.007 0.013 0.027 0.034 0.041 0.408 0.901 0.809 0.883 0.688 0.860 0.894 0.918 0.907 0.912 0.923 0.929 0.938 0.649 0.830 0.855 0.867 0.901 0.907 0.875 0.882 0.888 0.895 0.913 0.793 0.865 0.834 0.820 0.843 0.850 0.857 0.307 0.802 0.810 0.748 0.792 0.818 0.835 0.687 777.0 0.843 0.851 0.630 0.759 0.270 0.503 0.693 0.724 0.740 0.750 0.786 0.795 0.768 0.777 0.804 0.563 0.626 0.675 0.686 0.695 0.441 0.658 0.704 0.733 0.723 0.743 0.231 0.593 0.189 0.372 0.485 0.545 0.576 0.604 0.632 0.613 0.622 0.642 0.652 0.509 0.446 0.500 0.146 0.295 0.392 065.0 0.518 0.474 0.537 0.547 0.557 0.386 0.394 0.208 0.370 0.378 0.402 0.100 0.325 0.349 0.362 0.410 0.419 0.282 119 .193 .110 .207 .216 .153 .201 .211 .221 .227 12

CULUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION F JUNE

INPUT DATA

.021

.500 190.

167

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.363

0.518 0.395 0.443 0.475 0.314 0.355 0.253 .118

0.510 964.0 0.402 0.415 0.383 0.275 0.290 0.300 .163 .149 .157

0.424 0.432 .168

0.005 0.008

0.832

0.011 0.014 0.017

0.848 0.853 0.859

0.816

0.796

0.791

0.841

0.809 0.799

> 0.770 0.778

> 0.668 0.677

109.0

0.002 0.003

0.765 0.732

0.786

0.698

0.768 0.800 0.819

0.689 0.724 0.746 0.760

0.641

0.619 0.642

> 0.575 0.590

0.634

0.715

0.625

0.610 111

AFTER HEAVY STARTING DAY COLUMN XX IS SINGLE SITE

STATION F JULY

INPUT DATA

.013

.483

.129

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.000 0.000 0.003 0.001 100.0 0.002 0.004 0.005 0.312 0.428 0.504 0.626 0.552 0.582 0.613 0.631 0.635 0.642 0.601 0.621 0.638 0.395 0.468 0.515 0.562 0.574 0.588 0.544 0.582 0.592 0.596 009-0 0.259 0.430 0.360 92450 0.520 0.539 0.549 0.502 0.545 0.532 0.557 0.230 0.324 0.388 0.485 0.111 0.430 0.457 0.474 0.492 964.0 0.502 0.509 0.201 0.285 0.344 0.408 0.424 0.434 0.441 0.446 0.383 0.296 0.368 0.389 0.244 0.354 0.378 0.384 0.392 0.396 0.399 0.331 0.139 0.245 0.275 0.295 0.329 0.307 0.316 0.325 0.332 0.321 0.334 0.337 0.190 0.214 0.106 0.049 0.230 0.241 0.252 0.256 0.248 0.258 0.263 0.261 0.168 0.179 0.033 0.106 0.148 0.160 0.173 0.176 0.182 0.072 0.131 0.181 .037 •054 •095 .077 .088 960. 160. 060. .092 .084 **.068 *60** 2 122 **P** 00 0

CILUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION F AUG

INPUT DATA

.029

.097

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.000 0.000 0.000 0.000 0.041 0.281 0.315 0.339 0.356 0.380 0.177 0.367 0.375 0.289 0.327 0.337 0.345 0.350 0.257 191.0 0.311 0.306 0.087 0.296 0.282 0.144 0.193 0.232 0.261 0.313 0.318 0.274 0.280 0.077 0.207 0.233 0.252 0.265 0.220 0.180 0.149 0.240 0.025 0.110 0.203 0.232 0.093 0.126 0.187 0.055 0.152 0.197 0.204 0.209 0.172 0.017 0.045 0.075 0.102 0.124 0.153 0.174 0.167 0.141 0.161 0.171 0.034 0.124 0.057 0.013 0.077 0.094 0.117 0.128 0.134 0.135 0.107 0.131 160.0 0.023 0.038 0.079 0.008 0.052 0.064 0.073 0.084 0.087 0.000 0.092 0.093 .045 .019 .033 .037 .027 .043 940. .047 .011 .041 .047 0 110

CULUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

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STATION F SEPT

DATA INPUT .485

.015

200 .133

167

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN CULUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.002 0.003 0.005 900.0 0.008 0.001 0.007 0.001 00 0.436 0.570 0.517 0.557 0.562 0.566 0.574 0.578 0.583 0.547 0.509 0.403 0.520 0.524 0.528 0.536 0.540 0.532 0.545 0.481 0.503 0.479 0.368 0.469 0.495 664.0 0.441 0.484 0.487 0.491 0.507 0.446 0.450 0.454 0.435 0.439 0.445 0.458 0.394 0.156 0.378 0.387 0.391 0.397 904.0 0.291 0.401 0.335 0.327 0.338 0.341 0.344 0.347 0.351 0.284 0.286 0.289 0.278 0.295 0.298 0.281 0.292 0.158 0.211 0.226 0.231 0.196 0.219 0.224 0.081 0.228 0.233 0.221 0.217 0.055 0.146 0.150 0.154 0.108 0.135 0.155 0.157 0.159 0.160 0.152 0.162 .070 .080 •056 •076 -078 .085 .079 .083 .081 .082 •084 .086 13 6

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION F DCT

DATA INPUT -465

•010 .065

191. .290

PHOBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.028 0.040 0.002 0.008 0.034 0.015 0.021 • 0.843 0.852 0.862 0.833 0.892 0.585 0.836 0.870 0.794 0.827 0.878 0.885 0.899 0.800 0.804 0.811 0.849 0.821 0.858 0.865 0.831 0.841 0.832 0.805 0.718 0.754 0.761 0.765 0.773 0.783 0.794 0.814 0.823 0.840 0.669 0.749 0.799 0.459 0.707 0.760 0.780 0.190 0.727 0.738 0.714 0.718 9.771 0.658 0.662 0.683 0.695 0.727 0.410 0.613 0.706 0.737 0.747 0.717 0.651 0.671 0.672 0.355 0.546 0.584 0.595 909-0 0.616 0.640 0.682 0.591 0.628 0.651 0.661 0.691 0.296 0.569 0.469 0.579 0.504 0.515 0.523 0.535 0.558 0.600 0.609 0.547 0.590 0.511 0.232 0.378 0.409 0.416 0.419 0.426 0.447 0.458 0.468 0.478 164.0 0.437 0.487 0.301 0.296 0.304 0.310 0.161 0.271 0.318 0.327 0.335 0.343 0.351 0.359 0.367 991. .169 .179 .205 .146 .161 .164 .174 .185 .190 .195 .200 112 9 ~ 30

RAIN AFTER HEAVY COLUMN XX IS SINGLE SITE STARTING DAY

STATION F NOV

INPUT DATA

•020

.366

.167

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.003 0.005 900.0 0.001 0.00H 0.001 100.0 0.002 0.638 0.588 0.615 0.630 0.649 0.653 0.657 0.666 0.670 1999 0.662 0.43 165.7 164.0 0.550 U. 600 0.605 0.010 0.619 0.623 0.396 0.577 0.614 0.627 0.534 U.50H 0.549 0.580 0.363 0.557 0.457 0.567 0.562 0.571 0.575 0.414 0.488 0.180 0.462 0.509 0.519 0.523 0.501 0.515 0.368 0.413 0.436 674.0 0.466 0.287 0.457 0.470 0.474 0.478 0.462 0.482 0.380 0.318 0.358 0.392 0.399 0.246 0.403 0.407 0.411 0.415 0.418 0.263 0.299 0.107 0.202 0.318 0.328 0.345 0.334 0.338 0.342 0.352 0.156 0.205 0.234 0.269 0.081 0.249 0.258 0.263 0.266 0.272 0.275 0.278 0.142 0.189 0.195 0.199 0.162 0.174 0.180 0.184 0.187 0.191 0.193 0.197 0.107 660. • 102 +10-.055 .085 160. .095 .097 .098 100 .103 104 112 2 0

CULUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAI!

684.0 0.643

914.0

0.604 0.684

0.561

0.641

0.007

0.004

0.760

0.718

0.768

0.728

0.679

0.747

0.705

0.657

0.682

0.633 0.591

0.010

0.775

0.735 0.742

0.687

0.014 0.017 0.021

0.816

0.782

0.748

0.49 0.505

10+00

0.795

0.002

0.762 0.783 0.795 0.803 0.810

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ROW MEADS ARE DAYS SINCE WEATHER MATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE
                                                                          PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER MATCH IS INSTITUTED
                                                                                                                                                                                                              0.630
                                                                                                                                                                              0.577
                                                                                                                                                                                      0.600
                                                                                                                                                                      0.536
                                                                                                                                                                                              0.614
                                                                                                                                                                              0.512
                                                                                                                                                                                                             0.564
0.571
0.570
                                                                                                                                                                                              0.547
                                                                                                                                                                     0.400
                                                                                                                                                                                     0.457
                                                                                                                                                                                                                     0.492
                                                                                                                                                                                                     0.470
                                                                                                                                                                              0.436
                                                                                                                                                                                              0.469
                                                                                                                                                                                                              0.485
                                                                                                                                                                      0.319
                                                                                                                                            0.076
                                                                                                                                                                              0.350
                                                                                                                                                                                     0.367
                                                                                                                                                                                                      0.386
                                                                                                                                                                                                              0.392
                                                                                                                                                                                                                      0.398
                                                                                                                                            0.051
STATION F DEC
                                                                                                                                                                              0.249
                                                                                                                                                                                     0.263
                 DATA
                                                                                                                                                                                                     .150
                                                                                                                                                                                             141
                                                                                                                                                                                     -142
                                                                                                                                                                                                             .153
                                                                                                                                                                              -134
                INPUT
                                          .323
                                 .057
                        .298
                                                  .161
                                                                                                                                                                                                             2
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COLUMN XX IS SINGLE SITE STARTING DAY

0.422

UNCONDITIONAL PROBABILITY =.010

AFTER HEAVY

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INPUT DATA .012 .278 .549

191.

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

×		•	•	•	.000	.001	.002	.003	900.0	.010	.016	.023	.031	.041	.052
<u>c</u>	•	231	470	555	775	855	906	939	0 096-0	974	983	886	266	995	966
0		211	436	613	738	824	881	616	945	962	716	982	186	166	766
•	1	189	399	570	969	786	849	893	0.924 0.	946	196	216	616	985	686
7		168	359	525	949	741	809	859	0.895 0	922	146	926	196	975	186
•	1	146	317	694	165	989	158	813	0.855 0	887	912	931	946	126	996
5		123	272	410	525	619	769	753	0.800	838	868	892	912	927	046
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ю		910	174	271	360	438	909	999	0.620 0	999	104	737	767	793	918
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COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

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STATION G FEB

DATA INPUT .311

.207

115.

.071

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.000 0.000 0.000 00000 0.000 0.000 0.000 0.098 0.135 0.179 0.199 0.204 0.161 0.208 0.191 0.211 0.213 01 0.189 0.195 0.146 0.192 0.088 0.173 0.186 0.122 0.162 0.194 0.196 0.181 0.040 0.109 0.131 0.146 0.156 0.170 0.162 0.167 0.174 0.175 0.035 960.0 0.115 0.153 0.129 0.138 0.148 0.151 0.144 0.155 0.060 0.132 0.083 0.100 0.119 0.125 0.128 0.131 0.111 0.050 0.070 0.084 0.094 0.105 0.108 0.110 0.025 0.100 0.112 0.056 0.089 0.040 0.068 0.076 0.085 0.081 0.087 0.000 0.091 0.092 0.030 990.0 0.069 0.015 0.042 0.064 0.068 0.069 0.070 0.057 0.051 0.061 0.034 0.045 0.046 0.010 0.020 0.029 0.039 0.043 9.0.0 0.047 0.041 .010 .023 •023 +10-•10• .024 .024 .024 .005 .017 .021 .022 .023 912 13 2 12 80

SINGLE SITE STARTING DAY AFTER HEAVY COLUMN XX IS

0.090 0.173 0.233 0.275 0.303

0.082 0.157 0.213 0.251 0.277 0.307 0.315 0.328

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0.360

0.364

HEAVY

AFTER

COLUMN XX IS SINGLE SITE STARTING DAY

UNCONDITIONAL PROBABILITY =.000

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0.331

0.302

0.354

0.298

0.300

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0.291

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ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE
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STATION G APR

INPUT DATA

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW MEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.386 0.465 0.163 0.511 0.301 0.436 0.499 0.492 0.504 0.508 0.456 0.463 0.468 0.472 0.356 0.403 0.430 0.446 0.478 0.394 0.418 0.433 0.249 0.368 0.439 0.442 0.289 0.378 0.369 0.391 0.354 0.397 0.334 0.326 0.343 0.254 0.313 0.346 0.349 0.193 0.291 0.102 0.352 0.354 0.287 0.249 0.217 0.268 0.085 0.164 0.280 0.298 0.301 0.303 0. 0.069 0.133 0.249 0.237 0.241 0.205 0.177 0.221 0.247 0.231 0.251 0.171 0.187 0.052 0.158 0.192 0.193 0.195 0.116 0.129 0.093 690-0 0.108 0.132 0.133 .035 .048 •056 •065 990* 990. • 90 • .070 .070 .064 190. .067 137 • 9 ~ 80

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COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

MATCH BEGAN AVAILABLE

ROW MEADS ARE DAYS SINCE WEATHER COLUMN HEADS ARE NUMBER OF SITES

ONE SITE BECOMES

MEATHER WATCH IS INSTITUTED

PROBABILITY THAT AT LEAST

READY AFTER

STATION G NAY

DATA

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UNCONDITIONAL PROBABILITY =.001

AFTER HEAVY

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STATION G JUNE
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1NPUT DATA -445 -055 -333 -100 PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW MEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

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COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION G JULY

INPUT DATA

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

RUM MEADS ARE DAYS SINCE MEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.000 0.000 000.0 000.0 000.0 000.0 00000 0.000 0.157 0.165 0.168 0.101 0.143 0.150 0.154 0.155 0.037 0.154 0.155 0.155 0.091 0.139 0.113 0.139 0.139 0.139 0.033 0.128 0.140 0.072 0.099 0.122 0.122 0.123 901.0 0.086 0.098 901-0 0.107 0.062 0.103 0.105 0.105 0.106 0.089 0.089 0.000 0.082 0.086 0.088 0.089 0.089 0.072 0.052 0.072 0.058 990.0 0.000 0.071 0.072 0.072 0.072 0.017 0.072 0.055 0.054 0.053 0.054 0.055 0.055 0.013 0.031 0.050 0.054 0.055 0.037 0.029 0.035 0.036 0.036 0.037 0.034 0.037 0.037 0.037 0.037 •100 •010 •10. .018 .018 .018 .018 •10. • 015 .017 .019 71 13

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

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DATA INPUT 767. .323 .097 .021 .065 PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED RUM HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.165 0.041 0.093 0.131 0.153 0.174 0.171 0. 0.037 0.084 0.156 0.160 0.160 0.139 0.150 0.161 0.161 0.162 0.033 0.142 0.135 0.106 0.125 0.140 0.143 0.144 0.144 0.145 0.145 0.119 0.066 0.123 0.127 0.029 0.110 0.125 0.127 0.081 0.110 0.103 0.107 0.109 0.025 0.109 0.111 0.057 0.095 0.068 0.080 0.000 0.048 0.086 0.093 0.091 0.092 0.093 0.093 0.093 0.093 0.021 0.093 0.017 0.038 0.054 0.064 0.000 0.072 0.074 0.074 0.075 0.075 0.075 0.075 0.075 0.076 0.056 0.057 0.013 0.029 0.049 0.053 0.055 0.056 0.041 0.057 0.057 0.057 0.057 0.038 0.038 0.028 0.038 0.038 0.008 0.019 0.033 0.035 0.038 0.038 0.037 0.038 010. ·014 •016 .018 -019 .019 •10 .019 •019 .019 .019 .019 9 ~ 8 6 110

STARTING DAY AFTER HEAVY SINGLE SITE CULUMN XX IS

STATION G SEPT

INPUT DATA

-020

.166

191.

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

RUM HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.582 0.592 0.596 0.600 0.610 0.467 0.605 0.615 0.620 0.625 0.630 0.635 0.558 0.566 0.576 0.562 0.571 0.529 0.520 0.524 0.502 0.512 0.516 0.534 0.539 0.457 0.410 0.474 0.478 0.487 0.497 0.408 0.423 0.436 0.427 0.431 0.365 0.368 0.375 0.371 0.379 0.361 0.295 0.307 0.310 0.314 0.301 0.317 0.240 0.243 0.160 0.118 0.149 0.168 0.169 0.172 0.055 060. .093 • 095 .077 .084 .028 • 086 .087 .088 .089 .091 .092 .061 - 80 10

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COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION G DCT

INPUT DATA

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.129

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.097 0.013 0.027 0.042 0.057 0.084 0.071 0.977 0.668 0.880 0.930 0.945 0.955 0.969 976.0 096.0 0.965 0.980 0.951 0.985 0.938 0.944 0.962 0.957 0.909 0.926 0.933 0.951 0.967 0.971 0.931 0.951 0.945 0.902 0.910 0.916 0.923 0.938 0.957 0.881 0.913 0.845 0.869 0.878 0.886 0.929 0.894 0.904 0.936 0.921 0.854 0.835 0.876 0.896 0.905 0.824 0.865 0.844 0.887 0.765 0.778 0.788 0.799 0.812 0.825 0.837 0.656 0.686 0.700 0.710 0.766 0.723 0.737 0.752 0.792 0.594 999.0 0.550 0.633 0.649 0.678 0.605 0.618 0.692 0.581 174.0 0.452 0.346 0.413 0.440 0.462 0.474 0.516 0.530 0.487 0.502 0.544 0.557 .234 .325 .266 .294 .252 .260 .275 .284 161. .305 13 9 ~ 8 6

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION G NOV

DATA INPUT 961-

.037 194.

.133

167

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

WATCH BEGAN ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGACOLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.005 0.014 0.027 0.002 0.009 0.021 0.035 0.707 0.810 0.865 0.896 0.914 0.925 0.932 0.938 0.942 0.486 0.830 0.902 0.869 0.835 0.911 0.918 0.923 0.928 0.932 0.799 0.735 0.836 0.859 0.874 0.884 0.898 0.909 0.891 0.576 0.820 0.795 0.836 0.754 0.848 0.857 0.630 0.770 0.699 0.743 0.788 0.801 0.750 0.564 0.706 0.725 0.739 0.768 0.677 0.595 0.659 0.680 0.388 0.485 0.551 0.624 9.99.0 0.670 0.689 0.520 0.199 0.308 0.540 0.554 0.392 0.493 0.565 0.452 0.330 0.217 0.282 0.364 0.387 0.404 0.416 0.426 0.434 .153 .228 .115 .202 .217 .071 .242 .248 .253

HEAVY **AFTER** STARTING DAY SINGLE SITE CULUMN XX IS

STATION G DEC

INPUT DATA -134 .124

.419 .065 .258

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER MATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

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_	•				0.878										
٠	0.	0.339	0.602	0.754	0.835	0.881	0.907	0.924	0.936	0.945	0.951	0.957	0.962	0.967	0.971
S	•	0.291	0.536	0.689	0.778	0.830	0.862	0.884	0.899	0.910	0.920	0.928	0.935	0.942	0.948
4	•				0.700										
6	•	-	0.370	0.504	0.594	0.655	969.0	0.725	0.747	0.764	0.780	0.793	0.806	0.818	0.829
2	•	0.129	0.265	0.373	0.452	0.508	0.548	0.577	009.0	0.619	0.635	0.650	0.665	0.679	0.692
	•	190	.143	.208	.260	.298	.327	.350	.367	.382	.396	.409	.421	.433	.445
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CULUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

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0.962

SINGLE SITE STARTING DAY AFTER HEAVY

COLUMN XX IS

UNCONDITIONAL PROBABILITY =.873

0.941

0.304

0.087

STATION H JAN

INPUT DATA

.009

.613

191.

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0.567
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SITE STARTING DAY AFTER HEAVY CULUMN XX IS SINGLE

UNCONDITIONAL PROBABILITY

WATCH BEGAN

ROW MEADS ARE DAYS SINCE WEATHER WATCH BEGING COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

PROBABILITY THAT AT LEAST ONE SITE BECOMES

STATION H FEB

INPUT DATA

-005 .143 .214

.607

.031

WEATHER WATCH IS INSTITUTED

READY AFTER

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STATION H MAR
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.058
.058
.007
.226
.194
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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

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0.716
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                                            .894
                                                       .931
                                                            .943
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COLUMN XX IS SINGLE SITE STARTING CAY AFTER HEAVY RAIN

STATION H APR

INPUT DATA

.013

.233

433

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.163 0.243 0.309 0.015 0.077 0.364 0.411 0.455 0.497 0.536 0.573 0.999 1.000 1.000 1.000 0.875 1.000 1.000 1.000 1.000 0.995 1.000 • 000 000-1 1.000 1.000 1.000 1.000 1.000 1.000 0.999 1.000 000-1 0.999 1.000 0.991 0.997 1.000 1.000 1.000 000-1 0.985 0.999 0.999 666.0 000-1 000-1 1.000 1.000 1.000 0.766 0.975 0.999 0.999 0.994 0.997 0.998 966.0 1.000 1.000 1.000 1.000 0.958 0.988 0.993 0.995 0.999 0.999 966.0 0.997 0.998 1.000 1.000 0.929 0.974 0.989 0.646 0.983 986.0 0.992 966.0 966.0 0.998 866.0 0.999 0.999 0.879 0.989 0.564 946.0 0.962 0.968 0.972 0.978 0.984 0.992 0.994 966.0 0.997 0.998 0.795 0.943 0.956 996.0 994.0 0.888 0.914 0.974 0.980 0.987 0.924 0.932 0.984 0.875 0.937 0.768 908.0 0.820 0.834 0.853 0.926 9.60 0.340 0.652 0.895 0.912 .559 .592 .749 .576 .676 .703 .519 919. 949. .768 .410 .727 12 2 ~ 0

CULUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION H MAY

DATA TUGNI .431

.053 .032

.258

.226

PROBABILITY THAT AT LEAST ONE SITE BECOMES WEATHER MATCH IS INSTITUTED READY AFTER

WATCH BEGAN ROW MEADS ARE DAYS SINCE WEATHER WATCH BEGACOLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.010 0.017 0.028 0.033 0.039 0.004 0.022 0.044 0.049 0.408 0.824 0.850 0.802 0.814 0.818 0.858 0.873 0.747 0.832 0.866 0.841 0.887 0.767 0.799 0.780 0.785 0.790 0.710 0.808 0.818 0.827 0.836 0.844 0.770 0.726 0.790 0.800 0.739 0.759 0.780 0.808 0.667 0.745 0.751 0.618 0.678 0.713 0.723 0.735 0.745 0.755 99.100 0.307 0.692 0.697 0.703 0.270 0.635 0.668 0.679 0.690 0.562 0.647 0.656 0.700 0.710 0.621 0.641 0.590 0.231 0.555 0.574 0.580 0.623 0.568 0.612 0.634 164.0 0.654 0.663 0.601 9.644 0.495 0.510 0.189 0.423 0.476 0.489 0.520 0.542 0.562 0.572 0.552 0.531 0.582 0.501 0.146 0.338 0.385 0.396 0.443 0.453 0.401 904.0 0.414 0.424 0.434 0.462 0.480 0.471 0.241 0.100 0.289 0.293 0.315 0.323 0.276 0.285 0.300 0.307 0.338 0.346 0.353 0.331 .129 .157 .173 .196 .155 .149 .159 .163 .168 .177 .182 .187 191. 110 9 ~ 8 5

Z V Z HEAVY AFTER SINGLE SITE STARTING DAY COLUMN XX IS

STATION H JUNE

DATA INPUT .445

.055

.100 .233

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

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သ		203	465	556	584	594	665	409	910	0.617	624	631	638	449	159
1	•	0.180	0.421	0.509	0.536	0.545	0.550	0.555	0.561	0.568	0.575	0.582	0.589	0.595	0.602
•	•	0.156	0.374	0.456	0.482	0.491	964.0	0.501	0.507	0.513	0.520	0.527	0.533	0.540	0.546
Ŋ		132	324	398	422	431	435	440	445	0.451	457	494	410	476	485
4	•	0.107	0.269	0.334	0.355	0.363	0.367	0.371	0.376	0.381	0.387	0.393	0.398	0.404	0.409
6	•	0.081	0.209	0.263	0.280	0.287	0.290	0.294	0.298	0.302	0.307	0.312	0.317	0.321	0.326
7	•	0.055	0.145	0.184	0.197	0.202	0.204	0.207	0.210	0.213	0.217	0.221	0.224	0.228	0.231
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COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION H JULY

INPUT DATA

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160.

•226

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.002 0.013 0.005 0.009 0.016 0.020 0.024 0.027 ×× 0.319 0.628 0.718 0.745 0.755 0.768 0.775 0.806 0.820 0.783 0.791 0.798 0.761 0.292 0.590 0.680 0.708 0.718 0.739 0.755 0.725 0.747 0.763 0.731 0.547 0.637 0.665 0.676 0.682 0.689 0.697 0.705 0.714 0.500 0.588 0.616 0.633 0.640 0.648 0.657 0.665 0.674 0.627 0.699 0.682 0.691 0.577 0.000 0.206 0.570 0.448 0.560 0.583 0.591 609.0 694.0 0.495 0.505 0.390 0.526 0.559 0.534 0.512 0.543 0.567 0.518 0.551 0.457 0.473 0.327 0.397 0.142 0.421 0.449 0.465 0.436 0.442 0.481 964.0 0.431 0.109 0.316 0.337 0.345 0.349 0.355 0.257 0.367 0.388 0.395 0.361 0.239 0.253 0.269 0.074 0.180 0.245 0.249 0.258 0.285 0.290 0.263 .136 .128 .131 .134 .139 -142 .145 .148 .151

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION H AUG

INPUT DATA .388 .063

.032

.323

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.031 0.050 0.003 0.009 0.017 0.024 0.043 0.037 ×× 0.877 0.825 0.849 0.860 0.744 0.842 0.854 0.868 0.885 0.893 0.000 906.0 0.810 0.792 0.818 0.823 0.830 0.839 0.866 0.874 0.707 0.848 0.857 0.881 0.813 0.802 9.664 0.752 0.772 0.780 0.785 0.793 0.823 0.832 0.849 0.841 0.190 0.758 0.705 0.726 0.734 0.740 0.769 0.780 0.615 0.747 0.809 0.678 0.670 0.693 649.0 0.559 0.684 0.703 0.715 0.727 0.603 764.0 0.683 0.626 649.0 0.582 0.617 0.637 0.611 0.661 0.450 0.579 0.536 0.567 0.590 0.502 0.522 0.531 0.545 0.555 109.0 0.109 0.336 0.408 0.425 0.433 0.438 944.0 0.455 0.466 0.477 0.498 0.508 0.315 0.239 0.333 0.074 0.295 0.309 0.319 0.342 0.360 0.369 0.351 .169 .189 .200 .178 .205 .172 .175 .183 .194

CULUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

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STATION H SEPT

DATA INPUT .505

.133

.233

190

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

WATCH BEGAN AVAILABLE ROW HEADS ARE DAYS SINCE WEATHER COLUMN HEADS ARE NUMBER OF SITES

0.000 0.001 0.001 0.000 0.000 00000 0.001 0.001 0.257 0.290 0.303 0.308 0.310 0.311 0.277 0.282 0.266 0.284 0.285 0.286 0.288 0.291 0.287 0.289 0.240 0.255 0.257 0.258 0.259 0.260 0.261 0.142 0.251 0.262 0.263 0.229 0.213 0.230 0.230 0.187 0.223 0.227 0.231 0.232 0.199 0.200 0.163 0.186 0.195 0.198 0.203 0.202 0.201 0.172 0.138 0.158 0.168 0.169 0.091 0.165 0.171 0.171 0.134 0.142 0.018 0.074 0.128 0.139 0.140 0.112 0.137 0.138 0.138 0.140 0.141 0.142 0.056 0.085 0.098 0.103 0.104 0.013 0.105 0.106 0.106 0.107 0.108 0.107 0.108 0.070 0.071 0.072 0.072 0.073 990-0 0.071 0.038 0.058 0.072 .029 .019 .034 .035 .036 .036 .037 .037 .037 .037 .037 800

HEAVY AFTER STARTING DAY SITE SINGLE COLUMN XX 1S

STATION H DCT

INPUT DATA .450

-034

.161

161. 191. PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

WATCH BEGAN ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGINGLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.581 0.480 0.617 0.629 0.639 0.635 9.990 0.600 0.590 0.596 0.605 0.445 0.543 0.578 0.557 0.408 0.502 0.548 0.553 0.562 0.489 0.368 0.500 0.520 0.506 0.510 0.515 0.457 0.325 0.407 0.437 0.448 0.453 0.462 0.467 0.279 0.395 0.399 0.403 0.381 0.408 0.391 0.230 0.342 0.318 0.294 0.327 0.335 0.338 0.331 0.076 0.230 0.250 0.257 0.261 0.263 0.266 0.270 0.160 0.174 0.182 0.189 0.180 0.184 0.187 660. .083 960. .091 •00+ .098 .097 .063 8 2

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0.678 HEAVY AFTER SITE STARTING DAY 0.432 COLUMN XX IS SINGLE

STATION H NOV

INPUT DATA

.286 .081

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

× × 0	•	••	0.002	0.013	0.029	0.047	0.065	0.082	0.098	0.114	6-129	0.144	0.159
10	0.611	0.883	0.955	0.961	0.965	0.969	0.974	0.978	0.982	0.985	0.987	0.989	166.0
9	0.572	0.919	0.938	0.946	0.951	0.957	0.962	0.968	0.973	0.977	0.980	0.983	0.986
8 0	0.530	0.821	0.916	0.925	0.932	0.939	946.0	0.953	0.959	0.965	0.969	0.973	0.977
۰.0	0.483	0.858	0.885	0.897	0.905	0.913	0.922	0.931	0.939	0.946	0.953	0.958	0.963
• · ·	0.432	0.813	0.844	0.857	0.867	0.877	0.888	0.899	0.909	0.918	0.927	0.934	0.941
0.5	0.376	0.753	0.787	0.802	0.813	0.825	0.838	0.852	0.864	0.876	0.887	0.896	0.905
*	0.314	0.673	0.710	0.727	0.739	0.752	0.767	0.783	0.798	0.812	0.825	0.837	0.848
۰.0	9+2-0	0.567	909.0	0.622	0.635	0.649	0.665	0.682	66970	0.714	0.729	0.743	0.756
2 0	0.172	0.428	0.461	0.477	0.489	0.502	0.518	0.534	0.550	0.566	0.581	0.596	0.610
٠.	060.	.244	.266	.277	-285	.295	.305	.317	.329	.341	.353	.364	.375
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CULUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

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STATION H DEC
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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

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COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION J JAN

DATA INPUT 600

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

MATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE ROW HEADS ARE DAYS SINCE WEATHER

1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 0.972 1.000 1.000 1.000 1.000 1.000 000 -1 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 000.1 0.943 1.000 1.000 1.000 1.000 1.000 0.919 1.000 1.000 000.1 1.000 1.000 1.000 1.000 1.000 1.000 0.999 0.884 1.000 1.000 • 1.000 1.000 1.000 966.0 1.000 1.000 1.000 0.834 000-1 1.000 1.000 1.000 1.000 0.988 1.000 0.762 1.000 0.997 1.000 1.000 0.659 996.0 1.000 1.000 1.000 1.000 0.994 966.0 0.978 0.999 0.999 0.891 .988 .923 996. -952 .671 .851 .975 .982 1 8 0

0.500 0.700 0.826 0.898 0.937 0.959 0.973

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STARTING DAY AFTER HEAVY RAIN COLUMN XX IS SINGLE SITE

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ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE
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UNCONDITIONAL PROBABILITY =.870

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

STATION J JAN

.009 .023

.161

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STATION J FEB
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DA1

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

RUW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

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COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION J MAR

INPUT DATA

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.451

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

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COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

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HEAVY

AFTER

SITE STARTING DAY

SINGLE

COLUMN XX IS

UNCONDITIONAL PROBABILITY

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RUM HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE 0.947 0.959 0.969 0.811 0.915 0.965 0.974 0.978 0.985 PROBABILITY THAT AT LEAST ONE SITE BECOMES IS INSTITUTED 0.920 0.879 0.950 0.760 0.936 0.943 0.956 0.962 0.968 969.0 0.828 0.909 0.878 0.898 0.925 0.950 0.917 0.934 0.957 0.943 WATCH 0.887 0.756 0.839 0.614 0.814 0.853 0.863 0.875 0.898 0.910 0.920 0.929 0.936 READY AFTER WEATHER 0.789 0.873 0.652 0.746 0.805 0.820 0.835 0.862 0.511 0.717 0.762 0.775 0.849 0.379 0.569 0.599 0.506 0.616 0.630 0.646 0.699 0.733 STATION J APR 0.663 0.681 0.717 DATA .343 .297 .392 .405 .420 .367 .381 .436 .468 .452 INPUT 212 .200 .021 .267 .300

151

STATION J HAY

INPUT DATA

.029

.258

191

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

RUM HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.679 0.690 0.686 0.708 0.552 0.652 0.695 0.701 0.640 0.648 0.652 0.656 0.669 0.515 0.614 0.662 0.676 0.683 0.690 0.597 909.0 0.640 0.608 0.619 0.626 0.633 474-0 0.613 0.647 0.548 0.556 0.560 0.598 0.564 0.584 0.605 0.570 0.577 0.591 0.611 0.470 764.0 0.509 0.529 0.535 0.505 0.522 0.542 0.501 0.410 0.433 0.440 0.453 0.459 0.466 0.443 0.472 0.478 0.447 0.485 0.491 0.378 0.345 0.365 0.383 0.388 0.394 0.400 0.400 0.371 0.412 0.289 0.299 0.076 0.272 0.296 0.304 0.313 0.318 0.323 0.328 0.308 0.209 0.226 0.214 0.229 0.148 0.218 0.222 0.051 0.191 0.203 0.207 .107 .114 116 100 .077 109 .111 -112 .118 13

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COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

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STATION J JUNE

INPUT .521

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200

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.020 .010

0.218 0.189 0.215 0.185 0.049 0.121 0.160 0.183 0.039 0.149 0.144 0.075 0.100 0.110 0.114 0.075 0.050 0.067 .025 .034

0.151 0.115 0.116 0.117 0.079 0.079 .038 .040 .040 .040 w400000

0.080 .041 .041

0.153 0.154 0.155 0.117 0.119 0.081 .041 .041 SINGLE SITE STARTING DAY AFTER HEAVY RAIN COLUMN XX IS

STATION J JULY

INPUT DATA

.035

-194

160.

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.000 000-0 0.000 0.000 0.001 0.001 0.001 0.260 0.268 0.249 0.245 0.248 0.250 0.251 0.252 0.225 0.226 0.224 0.227 0.227 0.199 0.200 0.203 0.202 0.201 0.201 0.166 0.175 0.174 0.175 0.176 0.171 0.173 0.146 0.149 0.140 0.145 0-147 0.148 0.148 0.149 0.104 0.080 0.119 0.120 0.120 0.037 0.117 0.121 0.121 0.122 0.079 0.086 0.089 160.0 0.091 0.093 0.028 0.092 0.092 0.092 0.093 0.093 0.061 0.019 0.053 0.059 0.062 0.062 0.062 0.062 0.063 0.063 0.063 0.041 190.0 190.0 .030 .027 .032 .032 .032 .031 .031 .031 .032 .032 .021 .031 .032

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

INPUT DATA -499 -049 -194 -129

STATION J AUG

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

.129

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.000 0.002 000.0 0.002 0.001 0.002 0.003 0.001 0.430 0.395 0.450 0.154 0.366 904.0 0.297 0.413 0.416 0.418 0.423 0.425 0.411 0.363 0.374 0.379 0.383 0.386 0.388 0.390 0.272 0.337 0.395 0.381 0.392 0.356 0.358 0.331 0.362 0.349 0.126 0.246 0.306 0.345 0.347 0.351 0.354 0.360 0.341 0.321 0.273 0.296 0.309 0.219 0.305 0.312 0.314 0.315 0.319 0.317 0.323 0.111 0.239 0.277 0.096 0.276 0.260 0.268 0.272 0.274 0.283 0.191 0.279 0.284 0.281 0.237 0.204 0.229 0.236 0.080 0.234 0.239 0.162 0.222 0.232 0.240 0.242 0.243 0.197 0.065 0.167 0.193 0.195 0.199 0.132 0.188 0.192 0.136 0.200 0.182 0.191 0.201 0.049 0.128 0.145 0.148 0.149 0.100 0.140 0.147 0.150 0.152 0.153 0.154 0.155 0.151 0.102 0.103 0.033 0.068 960.0 0.099 0.100 0.101 0.105 0.087 0.103 0.104 0.106 .035 •045 640-.051 .052 .017 .052 .052 .053 .053 .053 .054 .054 01 11 13 9 ~ 8 6

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

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STATION J SEPT
INPUT DATA
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.167 .100 PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

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COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION J OCT

INPUT DATA

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191.

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.745 0.753 0.758 0.769 0.776 0.762 0.812 0.716 0.740 0.707 0.721 0.732 0.678 0.519 0.633 0.664 0.674 0.690 0.698 0.683 0.473 0.649 0.615 0.625 0.629 0.634 0.658 0.666 0.674 0.682 0.641 0.690 0.559 0.568 0.573 0.585 0.593 0.609 0.618 0.626 0.633 0.578 0.601 0.495 0.535 0.367 0.466 0.503 0.508 0.519 0.527 0.543 0.551 0.559 0.513 0.437 0.306 0.100 0.394 0.473 0.421 0.429 0.443 0.458 0.466 0.480 0.433 0.451 0.350 0.076 0.240 0.313 0.343 0.346 0.356 0.375 0.362 0.368 0.382 0.247 0.259 0.167 0.222 0.239 0.250 0.254 0.264 0.269 0.244 0.051 .134 .139 .132 .145 .148 .142 .136

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COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION J NOV

INPUT DATA

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.133

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.113 0.269 0.310 0.349 0.385 0.057 0.171 000.1 1.000 1.000 • 000 000 0.999 0.997 646.0 0.999 0.876 1.000 0.987 1.000 1.000 000.1 0.980 0.995 0.998 0.999 0.999 0.999 1.000 0.997 0.999 1.000 0.999 0.969 0.995 966.0 0.997 1.000 1.000 0.998 0.991 0.993 0.999 0.999 0.999 0.953 0.983 0.600 0.994 966.0 0.997 0.998 0.991 0.995 0.985 0.970 0.988 0.927 0.981 0.998 0.992 0.994 0.947 0.964 0.970 0.975 0.980 0.985 0.989 0.887 0.997 0.904 0.940 0.948 0.956 0.965 0.972 0.978 0.825 0.930 0.987 0.992 0.943 0.465 0.828 0.863 0.879 0.905 0.919 0.932 0.730 196.0 0.891 0.972 0.870 0.884 0.897 0.690 0.755 0.853 0.582 0.735 0.772 0.812 0.834 0.908 0.791 .188 .353 .443 .485 .505 .522 .592 .616 .639 .543 .567 .660 619. 8449

CULUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION J DEC

INPUT DATA

.323

.226

306

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.590 0.050 0.130 0.233 0.440 0.522 0.645 0.341 1.000 000-1 000 1.000 1.000 0000 1.000 000-1 000-1 1.000 1.000 166.0 1.000 1.000 1.000 1.000 1.000 000 0.985 1.000 1.000 1.000 0.999 1.000 • 000 1.000 1.000 000-1 1.000 000-1 0.998 1.000 1.000 .000 1.000 1.000 1.000 1.000 1.000 966.0 1.000 1.000 1.000 0.962 000 1.000 0.999 1.000 1.000 1.000 1.000 0.939 1.000 0.992 1.000 1.000 1.000 966.0 0.998 0.999 1.000 1.000 1.000 0.903 1.000 0.982 1.000 0.960 0.476 0.999 0.987 0.994 0.997 0.998 0.998 0.999 1.000 0.845 0.992 0.910 0.979 0.986 0.600 166.0 0.999 0.962 0.996 0.997 0.753 0.998 0.925 0.986 0.799 0.953 0.969 0.887 0.942 0.975 0.990 0.607 196.0 0.981 .373 .552 .663 .726 . 783 .623 641. .760 . 803 .843 .863 .882 .898 9~00 2722

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

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ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE
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UNCONDITIONAL PROBABILITY

ONE SITE BECOMES

READY AFTER WEATHER WATCH IS INSTITUTED

PROBABILITY THAT AT LEAST

STATION K JAN

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.046 .008 .125 .286 .535 PROBABILITY THAT AT LEAST ONE SITE BECOMES

READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.626 0.238 0.463 0.784 0.827 0.862 0.893 000-1 000 • 1 .000 000 1.000 000 1.000 1.000 1.000 1.000 000-1 1.000 1.000 000 00001 000 000.1 000-1 1.000 1.000 1.000 • 000 0.952 1.000 000.1 1.000 • 000 000.1 000-1 • 000 000-1 000-1 000 • 000 000 000.1 000-1 000.1 • 000 000 000 0.999 1.000 1.000 1.000 000 .000 1.000 000-1 000-1 000.1 1.000 1.000 000-1 000 0.998 1.000 1.000 0.868 1.000 1.000 000-1 1.000 1.000 0.995 0.815 1.000 000 1.000 1.000 000-1 .000 000-1 000-1 000-1 000-1 000 1.000 000 0.740 0.999 0.999 1.000 1.000 0.997 0.997 0.998 000.1 .000 0.636 1.000 1.000 0.959 0.999 1.000 1.000 0.992 1.000 0.977 0.998 0.990 0.994 0.997 0.999 0.999 164.0 0.985 0.881 0.961 0.981 .878 .803 .848 .863 .899 .923 .943 996. .958 .975

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION K MAR

INPUT DATA

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.258

.516

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.744 0.430 0.290 0.785 0.037 0.144 0.544 0.630 0.694 1.000 1.000 1.000 000-1 0.999 1.000 1.000 000-1 000 1.000 1.000 0.955 1.000 1.000 1.000 000-1 000 • 1 000 • 1 000 • 1 000-1 000 -1 1.000 1.000 0.999 1.000 000 - 1 1.000 000 1.000 • 000 000 • 1 000 • 000 .000 0.998 1.000 1.000 0000-1 1.000 00001 000 • 1 0000 ..000 .000 000 0.995 0.999 1.000 000 000 000 000 000 000 000-0.989 1.000 0.844 •000 .000 1.000 000.1 000 000 0.977 ..000 000 •000 0.787 0.999 0.997 0.999 000 .000 000 0.998 .000 000 • 000 0.710 0.952 0.991 0.997 666.0 966.0 000 0.897 0.970 000 • 0000 0.605 966.0 166.0 0.999 0.999 0.987 0.992 1.000 0.780 0.903 976-0 0.994 0.959 0.968 0.975 966.0 0.462 0.987 0.997 0.998 0.981 166.0 .266 .688 . 799 .820 .924 .907 .764 948 .531 .841 .864 -887 .937

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIS

STATION K APR

DATA INPUT -264

.036

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

WATCH BEGAN ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGACOLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.064 0.087 0.109 0.169 0.018 0.000 0.130 0.150 0.965 0.977 0.983 0.986 0.988 0.993 966.0 966.0 0.921 0.997 0.691 0.981 166.0 0.975 0.978 0.971 0.653 0.898 0.966 0.988 0.600 0.952 0.985 0.982 0.992 0.957 0.967 0.609 0.869 0.932 0.950 0.977 0.962 0.984 0.972 0.981 0.987 0.949 0.905 0.928 0.956 0.968 0.943 0.962 0.973 0.561 0.831 0.937 0.984 0.977 0.506 0.867 0.895 906.0 0.940 0.948 0.955 0.970 0.914 0.782 0.922 196.0 0.931 0.444 0.719 0.814 0.870 0.892 0.904 0.915 0.924 0.933 0.940 0.847 0.861 0.881 0.847 0.739 0.375 0.638 7777 0.794 0.805 0.818 0.832 0.861 0.873 0.885 0.895 0.297 0.707 0.721 0.533 0.635 0.676 769.0 0.738 0.755 0.772 0.788 0.802 0.490 0.209 0.398 0.528 0.546 0.573 0.590 0.609 0.644 0.676 0.558 0.627 0.661 169.0 .313 .326 .335 .347 .360 .374 .389 404 -417 .431 13

HEAVY AFTER COLUMN XX IS SINGLE SITE STARTING DAY

STATION K MAY

INPUT DATA

.431

.323

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

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6	•	0.211	0.347	0.417	0.452	0.468	0.477	0.482	0.486	0.489	0.492	0.495	0.498	0.501	0.564
30	•	0.189	0.315	0.381	414.0	0.430	0.438	0.443	144.0	0.450	0.452	0.455	0.458	0.461	0.464
~	•	0.168	0.282	0.343	0.373	0.388	0.396	0.401	0.404	0.407	0.410	0.412	0.415	0.418	0.420
9		0	•	0	•	•	•	ö	•	0.361	0	ö	•	0	•
~	•	0.123	0.211	0.259	0.284	0.296	0.303	0.306	0.309	0.311	0.314	0.316	0.318	0.320	0.323
•	•	0.100	0.172	0.213	0.234	0.245	0.250	0.254	0.256	0.258	0.260	0.262	0.254	0.266	0.268
•	•	0.076	0.132	0.165	0.181	0.190	0.194	0.197	0.199	0.201	0.202	0.204	0.205	0.207	0.208
8	•	0.051	0.000	0.113	0.125	0.131	0.134	0.136	0.137	0.139	0.140	0.141	0.142	0.143	0.144
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COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

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01	•	0.044	0.100	0.143	0.170	0.184	0.192	0.196	0.198	0.199	0.200	0.200	0.201	0.201	0.202
6	•	0.040	0.091	0.130	0.154	0.168	0.175	0.178	0.180	0.181	0.182	0.182	0.183		
80	•	0.035	0.081	0.116	0.138	0.151	0.157	0.160	0.162	0.163	0.163	0.164	0.164	0.165	_
1	•	0.031	0.071	0.103	0.122	0.133	0.139	0.142	0.143	0.144	0.145	0.145	0.145	0.146	0.146
•	•	0.027	0.061	0.089	0.106	0.115	0.120	0.123	0.124	0.125	0.125	0.126	0.126	0.126	0.126
8	•	0.022	0.052	0.074	0.089	0.097	0.101	0.103	0.105	0.105	0.106	901.0	0.106	2	0.107
*	•	0.018	0.041	0.000	0.072	0.078	0.082	0.084	0.085	0.085	0.085	0.086	0.086	0.086	0.086
6	•	.013		0.045	054				990		990		0.065	0.065	0.065
~	•	0.009	0.021	0.030	0.037	0.040	0.042	0.043	0.043	0.043	0.044	0.044	0.044	0.044	0.044
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COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

UNCONDITIONAL PROBABILITY .. 000

165

STATION K JULY

DATA INPUT .471

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

WATCH BEGAN AVAILABLE COLUMN HEADS ARE NUMBER OF SITES RUM HEADS ARE DAYS SINCE WEATHER

0.000 0.000 0.000 00000 000.0 0.000 00000 0.000 0.000 0.119 0.010 0.044 0.079 0.104 0.134 0.133 0.134 0.134 0.135 0.127 0.131 0.071 0.009 0.040 0.094 0.107 0.115 0.118 0.120 0.122 0.121 901-0 0.035 0.109 0.064 0.084 0.096 0.103 901.0 0.108 0.109 0.109 0.109 0.007 0.056 0.074 0.085 0.000 0.093 0.095 960.0 960.0 960.0 960-0 960.0 0.031 0.097 0.048 0.082 0.006 0.027 0.064 0.078 0.081 0.083 0.083 0.073 0.082 0.083 0.083 0.070 0.053 0.069 0.069 0.010 0.005 0.040 0.065 0.068 0.000 0.010 0.022 0.061 0.056 0.056 0.018 0.049 0.056 0.056 0.004 0.032 0.043 0.053 0.054 0.055 0.056 0.013 0.042 0.003 0.024 0.037 0.040 0.042 0.042 0.043 0.032 0.041 0.042 0.042 0.027 0.028 0.029 0.000 0.016 0.025 0.028 0.028 0.028 0.028 0.029 0.002 0.022 .008 +00-.013 .014 +10-.001 .013 +10. .014 .014 .011 .014 .014 112 0 0 10

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COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

UNCONDITIONAL PROBABILITY =.000

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

STATION K AUG

INPUT DATA

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STATION K SEPT

INPUT DATA

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.00 0.001 0.001 0.002 0.001 0.001 0.001 0.359 0.379 0.384 0.372 0.382 0.388 0.391 0.354 0.330 0.349 0.355 0.358 0.343 0.352 0.357 0.360 0.323 0.275 0.300 0.311 0.317 0.320 0.322 0.289 0.268 0.291 0.234 0.148 0.215 0.216 0.212 0.214 0.217 0.120 0.173 0.175 0.176 0.177 0.178 0.179 0.125 0.130 0.133 0.135 0.135 0.136 0.137 0.137 0.091 0.094 0.089 0.092 0.092 0.093 0.093 0.091 .044 .040 .046 .047 .048 .048 .048 .047 .048 .049 9 7

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION K OCT

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INPUT DATA

.451

.355

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

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10	•	0.740	0.938	0.980	166.0	0.995	966.0	0.997	0.998	866.0	0.999	0.999	0.999	1.000	1.000
0	•			0.970											
60	•	099.0	0.891	0.956	0.977	0.985	0.988	0.991	0.993	966.0	0.995	966.0	0.997	0.998	0.998
7	•	0.611	0.857	0.935	0.963	0.974	0.980	0.984	0.986	0.989	166.0	0.993	0.994	0.995	966.0
•	•	0.554	0.811	0.904	0.940	0.956	0.965	0.970	0.975	0.979	0.982	0.985	0.988	0.600	0.992
S		490	150	0.859	905	126	686	146	954	096	596	970	975	616	286
4	•	0.417	0.670	0.791	0.848	0.876	0.893	0.905	0.914	0.924	0.932	0.940	0.948	0.954	0.960
ĸ	•	0.332	0.565	0.691	0.756	0.791	0.813	0.828	0.842	0.855	0.867	0.879	0.890	0.901	0.910
7		236	456	0.543	910	849	672	169	108	124	140	156	771	785	199
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COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION K NOV

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.129 0.268 0.410 0.529 0.690 0.744 0.031 0.621 0.999 1.000 1.000 000 0000 1.000 00001 000 000.1 1.000 1.000 1.000 0.944 1.000 000 • 000 000 0000 1.000 000 0.998 1.000 1.000 1.000 1.000 0.925 1.000 • 000 000 000 ..000 000 000 000.1 1.000 000 000 0.900 0.997 000 000 000 • 000 000 .000 0.867 1.000 .000 0.993 1.000 .000 .000 .000 000 000 • 000 000 ..000 000 000 0.822 0.999 1.000 000 0.987 000 000 ..000 .000 000 000. ..000 .000 1.000 966.0 0.999 000 0.763 0.972 666. 000 .000 .000 .000 •000 966. 0.684 0.989 166.0 0.999 • 000 0.943 966.0 1.000 1.000 0.578 0.884 0.995 0.999 0.999 996.0 986.0 0.998 1.000 0.992 0.437 0.995 966-0 0.998 0.895 0.977 0.998 0.762 0.943 0.983 0.992 0.961 0.970 0.988 -869 .676 .926 .950 .848 016. .802 .890 .939 .761 .827

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

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UNCONDITIONAL PROBABILITY =.89

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

STATION K DEC

DATA

INPUT

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-275

100-

-065

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HEAVY

AFTER

DAY

STARTING

SITE

SINGLE

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UNCONDITIONAL PROBABILITY = .867

RCW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

PRUBABILITY THAT AT LEAST ONE SITE BECOME

READY AFTER WEATHER WATCH

.387

STATION L JAN

DATA

INPUT .008 .008 .597 IS INSTITUTED

TOGA	DATA
280	
700	
554	

.036

STATION L FEB

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

×			.0	•	0.003	0.014	0.034	0.063	0.099	0.141	0.185	0.229	0.273	0.315	0.354
10	•	0.663	0.923	0.984	966.0	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
σ	0.	0.624	0.901	0.975	0.993	966.0	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
80	0.	0.581	0.872	0.963	0.988	966.0	0.998	0.999	0.999	1.000	1.000	1.000	1.000	1.000	1.000
~	0.	0.533	0.834	0.944	0.979	166.0	966.0	0.997	0.998	0.999	0.999	0.999	1.000	1.000	1.000
•	0.	0.479	0.786	0.915	996.0	0.983	0.990	966.0	966.0	0.997	0.998	0.998	0.999	0.999	666.0
8	•	0.419	0.723	0.872	0.937	0.966	0.979	986.0	0.66.0	0.992	966.0	0.995	966.0	166.0	966.0
4	•0	0.353	0.642	0.807	0.891	0.933	0.955	0.967	0.975	0.980	0.984	0.987	0.989	166.0	0.993
m	•	0.278	0.537	0.709	0.810	0.869	0.902	0.923	0.937	0.947	0.954	0.961	996.0	0.971	0.975
8	•	0.195	0.402	0.561	0.670	0.741	0.788	0.819	0.841	0.858	0.872	0.884	968.0	906.0	0.915
-	•	_		_	.426								677		402
	_	7	٣	*	S	9	_	80	5	01	=	12	13	14	15

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

INPUT DATA -092 -005 -613 -032 -258

STATION L MAR

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.013 0.043 0.142 0.005 0.026 0.088 0.114 0.064 ×× 1.000 1.000 1.000 0.999 0.498 0.935 0.976 966.0 0.998 0.999 0.999 1.000 0.811 166.0 0.993 0.997 0.999 0.999 0.985 0.914 0.966 966.0 0.998 0.999 0.462 0.777 0.950 0.976 0.995 966.0 0.998 0.887 0.987 0.992 0.997 0.998 666 0 0.689 0.66.0 0.986 0.978 0.993 0.995 0.852 0.927 0.962 966.0 0.997 0.997 986.0 0.805 0.894 0.939 0.989 0.994 0.962 0.974 0.981 0.991 0.992 0.744 0.291 0.566 0.934 0.846 0.903 0.964 0.980 0.983 0.985 0.952 0.976 0.971 999.0 0.487 0.929 656.0 0.956 0.777 0.912 0.845 0.887 0.941 0.961 0.394 0.675 0.805 0.839 0.863 0.893 0.559 0.880 0.904 0.187 0.912 0.920 0.753 0.663 0.129 0.790 0.815 0.420 0.284 0.527 0.606 0.734 0.757 0.775 0.803 .239 .420 .067 .154 .525 .570 .312 .372 .484 .507 .556 .456 .541 112 975 0

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION L APR

INPUT DATA

•154 •013

999.

191.

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.002 0.003 900.0 0.009 0.012 0.878 0.920 0.939 0.772 0.903 0.945 0.838 0.950 0.492 0.931 0.625 0.736 0.805 0.849 0.878 0.910 0.920 0.927 0.932 0.897 0.766 918.0 0.693 0.846 0.883 0.894 0.909 0.582 0.867 0.902 0.645 0.720 0.859 0.869 0.805 0.829 0.877 0.847 0.480 0.754 0.799 0.588 0.664 0.717 0.780 0.814 0.420 0.597 0.651 0.689 0.754 0.287 0.522 0.717 0.517 0.607 0.353 944.0 0.107 0.237 0.569 0.636 0.657 9.674 0.687 0.450 0.184 0.358 0.468 0.504 0.568 0.081 0.531 0.552 0.196 0.256 0.305 0.415 0.429 0.055 0.127 0.343 0.373 0.397 •166 .190 .223 •065 .103 .235 .137 .208 .028 .244 F 8 5

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION L MAY

DATA INPUT .356

.031

.581

.032

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN CULUMN HEADS ARE NUMBER OF SITES AVAILABLE

×		0		0	00000	0.00	0.000	00000	00000	00000	00000	00000	00000	00000	00000
10	0	0.010	0.022	0.033	0.041	0.048	0.052	0.055	0.057	0.059	0.060	0.060	0.061	0.061	0.061
6	•	0.009	0.020	0.030	0.037	0.043	0.047	0.050	0.052	0.053	0.054	0.055	0.055	0.055	0.055
00	•	0.008	0.018	0.026	0.033	0.038	0.042	0.044	0.046	0.047	0.048	0.049	0.049	0.049	650.0
~	•	0.007	0.016	0.023	0.029	0.034	0.037	0.039	0.040	0.042	0.042	0.043	0.043	0.043	0.043
•	•	900.0	0.013	0.020	0.025	0.029	0.032	0.034	0.035	0.036	0.036	0.037	0.037	0.037	0.037
S	•	900	011	110	021	024	970	028	0.029	030	030	031	031	031	031
4		0.004	0.009	0.013	0.017	0.019	0.021	0.022	0.023	0.024	0.024	0.025	0.025	0.025	0.025
m	•	0.003	0.007	0.010	6.013	0.015	0.016	0.017	0.018	0.018	0.018	0.019	0.019	0.019	0.019
7	•	0.002	0.004	0.007	0.008	0.010	0.011	0.011	0.012	0.012	0.012	0.012	0.012	0.013	0.013
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COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

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COLUMN HEADS ARE NUMBER OF SITES AVAILABLE
                                 0.123
                                             0.230
                          0.055
                                                    0.264
                                                                                   0.325
                                                                                         0.329
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                                                          0.287
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                                                                       0.313
                                                                             0.321
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                                 0.104
                                              0.196
                                                          0.246
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                           0.046
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AFTER HEAVY

COLUMN XX IS SINGLE SITE STARTING DAY

UNCONDITIONAL PROBABILITY =.001

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN

PROBABILITY THAT AT LEAST ONE SITE BECOMES

STATION L OCT

INPUT DATA

.310

.515

290.

READY AFTER WEATHER WATCH IS INSTITUTED

DATA INPUL 167 .149 .500 910.

STATION L NOV

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.033 0.045 0.003 0.014 0.022 0.057 0.007 0.001 0.879 0.969 0.976 0.983 0.956 0.980 0.985 0.989 0.600 0.931 0.987 0.956 0.940 0.965 0.851 0.910 0.975 0.978 0.971 0.938 0.882 0.692 0.816 0.918 0.949 0.962 996.0 0.957 0.972 0.643 0.846 0.936 0.178 0.927 0.943 0.953 0.957 0.772 0.888 0.912 846.0 0.719 0.799 0.905 0.847 0.875 0.893 0.587 **\$16.0** 0.927 0.190 0.860 0.130 0.653 0.845 0.737 0.879 0.887 0.521 0.824 0.871 901.0 0.280 0.445 0.571 0.714 0.805 0.816 0.657 0.751 0.775 0.792 0.825 0.834 0.218 0.470 0.080 0.552 0.674 0.740 909-0 0.647 0.707 0.357 0.692 0.414 0.054 0.151 0.465 0.501 0.526 0.255 0.345 0.544 0.559 0.582 0.592 0.603 .079 161. .028 .235 .268 .293 .311 .336 .137 .325 .353 .345 110 45 9 ~ 800 71

AFTER HEAVY COLUMN XX IS SINGLE SITE STARTING DAY

STATION L DEC

INPUT DATA

.011

.032

.323

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

RUW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.038 0.072 0.117 0.170 × 1.000 1.000 1.000 0.989 1.000 1.000 1.000 0.934 0.998 1.000 0.668 0.999 1.000 1.000 1.000 1.000 1.000 0.629 0.997 0.999 1.000 000-1 1.000 0.994 1.000 1.000 0.989 0.999 1.000 0.997 1.000 1.000 0.979 0.997 0.999 1.000 1.000 0.993 9.660 0.960 0.984 0.999 0.897 0.993 0.997 0.998 696.0 0.600 0.997 0.998 0.924 966.0 966.0 0.981 0.967 0.978 0.984 0.988 0.916 0.949 166.0 0.419 0.598 0.808 0.898 0.949 0.958 0.937 0.862 0.921 .475 .719 .562 .750 .629 .680 .774 10 12 13 9 ~ 9 6

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

UNCONDITIONAL PROBABILITY

179

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STATION M JAN
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INPUT DATA
-008
-008
-242
-032

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

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0.891
                             0.659
                                  0.806
                                                    0.963
                                              0.938
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                                 986.
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          906.
               .952
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                                      .991
                                                  166.
                                                        866.
                                                                   666.
     .787
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COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

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STATION M FEB
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INPUT DATA
-063
-008
-429
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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

RUW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

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0.299
                                 0.396
                      0.196
                                            0.553
                                      0.481
                                                  0.614
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          0.991
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                0.982
                     0.988
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                          166.0
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                                0.966
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                                                 0.985
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                                     .837
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CULUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

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1.000

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0.981

0.279

1.000

1.000

1.000

1.000

0.395

1.000

1.000

1.000

HEAVY

COLUMN XX IS SINGLE SITE STARTING DAY AFTER

UNCONDITIONAL PROBABILITY =.222

1.000

1.000

1.000

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ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE
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                                                                     ONE SITE BECOMES
                                                                            READY AFTER WEATHER WATCH IS INSTITUTED
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                                                                    PROBABILITY THAT AT LEAST
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                                                                                                                                                         0.864
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STATION M MAR
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STATION M APR

DATA INPUT .154

.013 009.

.033

.200

PROBABILITY THAT AT LEAST ONE SITE BECOMES IS INSTITUTED WEATHER WATCH READY AFTER

WATCH BEGAN ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGACOLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.013 0.027 0.035 0.001 0.004 0.007 0.019 0.044 0.956 0.974 0.335 0.917 0.965 0.618 0.784 0.871 0.942 0.970 0.980 0.977 0.982 0.984 0.940 0.970 0.951 0.580 0.893 0.923 0.958 0.307 0.748 0.842 0.963 0.967 0.863 0.279 0.706 0.806 0.897 0.947 0.956 0.959 0.537 0.918 0.940 0.952 0.931 0.490 0.249 0.658 0.825 0.863 0.888 0.915 0.929 0.935 0.762 0.904 0.923 0.939 0.846 0.439 0.217 0.601 0.708 0.775 0.818 0.865 0.879 0.889 0.897 0.904 0.910 0.759 0.190 0.535 0.185 0.840 0.849 0.865 0.872 0.382 0.712 0.812 0.828 0.858 0.641 0.679 0.559 0.151 0.320 0.458 0.630 0.755 0.769 0.790 0.799 0.713 0.737 0.780 0.807 0.574 0.115 0.368 0.459 0.526 0.251 0.608 0.633 0.652 0.667 0.679 0.690 0.699 0.264 0.078 0.175 0.434 0.392 0.464 0.488 0.505 0.519 0.531 0.542 0.560 0.551 .142 .185 .220 040 .092 .247 .268 .284 .297 .315 .323 .330 .307 9 125 9 10 0

SITE STARTING DAY AFTER HEAVY SINGLE COLUMN XX IS

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STATION M MAY
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.344 .043 .516

160.

PROBABILITY THAT AT LEAST ONE SITE BECOMES RFADY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.000 00000 000-0 0.000 0.000 0.001 0.001 0.001 0.001 0.000 0.179 0.245 0.290 0.319 0.338 0.357 0.366 0.350 0.370 0.362 0.368 0.373 0.082 0.163 0.265 0.310 0.328 0.333 0.336 0.340 0.292 0.321 0.338 0.341 0.240 0.265 0.309 0.073 0.146 0.201 0.298 0.305 0.281 0.291 0.302 0.307 0.179 0.213 0.236 0.260 0.266 0.270 0.273 0.276 0.251 0.186 0.055 0.206 0.219 0.228 0.233 0.239 0.112 0.237 0.241 0.157 0.046 0.175 0.186 0.194 0.198 0.205 0.131 0.202 0.204 0.076 901.0 0.165 0.037 0.128 0.143 0.158 0.162 0.165 0.168 0.169 0.169 0.152 0.028 0.109 0.124 0.126 0.057 0.098 0.116 0.128 0.129 0.121 0.085 .028.0.055 990.0 0.086 0.019 0.039 0.074 0.079 0.082 0.087 0.088 0.088 0.089 040 .043 .042 •045 .045 .038 .044 .045 .034

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION M JUNE

INPUT DATA

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

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COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION M SEPT

INPUT DATA

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER MATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.047 0.038 0.042 0.044 0.045 0.046 0.047 0.047 0.031 0.047 0.037 0.028 0.040 0.034 0.042 0.041 0.042 0.042 0.042 0.025 0.030 0.033 0.035 0.036 0.038 0.037 0.038 0.038 0.018 0.038 0.022 0.026 0.029 0.033 0.008 0.031 0.032 0.033 0.033 0.025 0.028 0.028 0.023 0.007 0.013 0.019 0.027 0.027 0.028 0.029 0.029 0.019 0.016 0.021 0.005 0.022 0.023 0.023 0.024 0.024 0.024 0.024 0.024 0.011 0.024 0.004 0.019 0.009 0.013 0.015 0.017 0.018 0.018 0.019 0.019 0.019 610.0 0.019 0.019 0.010 0.014 0.013 0.014 0.014 0.003 0.007 0.011 0.013 0.014 0.014 0.014 0.014 0.01 900.0 0.000 0.009 0.009 0.010 0.010 0.010 0.002 0.005 0.008 90000 0.010 0.010 0.010 .002 .003 +00-.005 .005 .005 .005 .005 +00+ .004 .005 .005 100 9 12 13

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COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION M OCT

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

COLUMN HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.005 0.010 0.013 0.016 0.019 0.001 0.003 0.007 0.804 0.772 0.818 0.548 0.791 0.812 0.671 0.735 0.633 0.699 0.769 0.778 0.190 0.756 0.802 0.589 0.656 0.693 0.715 0.728 0.644 0.680 999.0 0.689 0.697 0.607 0.541 0.588 0.610 0.647 0.487 0.623 0.633 0.654 0.641 0.580 0.487 0.522 0.543 0.557 0.446 994.0 964.0 0.478 0.507 0.501 0.386 0.394 0.400 0.358 0.375 904.0 0.330 0.289 0.293 0.269 0.298 .145 .150 .157 .159 .137 .154 .162 2

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

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1NPUT DATE -060 -007 -400 -033 PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

RUM HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

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COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

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COLUMN XX IS SINGLE SITE STARTING DAY

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

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7		0.993	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
9	•	0.985	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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*	•	0.940	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
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COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

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10		0.981	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
6	•	0.972	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
00	•	0.958	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
7	•	0.938	0.998	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
•	•	0.907	966.0	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
S	•	0.862	0.600	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
*	•	0.795	0.974	0.995	0.998	0.999	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
æ	•	0.695	0.936	0.981	166.0	0.994	966-0	0.997	966.0	666.0	1.000	1.000	1.000	1.000	1.000
8	•	0.547	0.839	0.930	0.956	996.0	0.973	0.980	0.987	166.0	0.994	966.0	0.998	0.998	0.999
-	•	.327	.599	.735	.790	. 815	.835	.859	.884	.907	.926	046.	166.	.960	196.
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COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION N MAR

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED ROLUMN HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

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10		0.972	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
0		0.960	0.998		1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
90	•	0.943	0.997	0.999	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
~	•	0.918	0.993	0.998	0.999	0.999	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
•	•	0.883	0.986	0.995	0.997	0.997	0.998	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000
S	•	0.832	0.972	0.988	0.991	0.993	0.995	0.997	0.998	0.999	1.000	1.000	1.000	1.000	1.000
4	•	0.760	0.943	0.970	0.977	0.981	0.986	0.991	0.994	966.0	966.0		0.999		1.000
æ	•	0.657	0.884	0.929	0.941	0.949	0.960	0.971	0.980	0.986	0.660	0.992	966.0	0.996	166.0
2	•	0.510	0.762	0.828	0.849	0.863	0.882	0.905	0.925	0.941	0.952	0.961	0.969	0.975	0.980
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COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION N APR

INPUT DATA

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER MATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

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COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

RGW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

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00	•	0.189	0.423	0.545	0.597	0.618	0.628	0.634	0.639	0.645	0.651	0.658	999.0	0.671	0.677
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5		123	291	388	433	452	0.461	466	471	476	482	488	464	200	206
4	•	0.100	0.241	0.325	0.365	0.382	0.390	0.395	0.399	0.404	0.409	0.415	0.450	0.426	0.432
6	•	0.076	0.187	0.255	0.289	0.303	0.310	0.314	0.318	0.322	0.326	0.331	0.336	0.341	0.345
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CULUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION N JUNE

INPUT DATA .475

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

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CULUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION N JULY

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

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~						0.004									0.019
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v	•	•	•	0.000	0.001	0.003	0.005	0.007	0.008	0.010	0.011	0.012	0.013	0.013	0.014
4	•	•		C.000	0.001	0.002	0.004	0.005	0.007	0.008	0.009	0.009	0.010	0.011	0.011
6	•	•	•	0.000	0.001	0.002	0.003	0.004	0.005	900.0	0.007	0.007	0.008	0.008	0.008
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COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

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SITE BECOMES INSTITUTED	WATCH	•		••						0000		000.0					000	DAY
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UNCONDITIONAL PROBABILITY =.000

STATION N AUG

INPUT DATA -574 -071 -323 -032 ××

STATION N SEPT

INPUT DATA

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.200

133

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

RUM HEADS ARE DAYS SINCE WEATHER WATCH REGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.555 0.383 0.484 0.535 0.540 0.543 0.547 0.559 0.563 0.551 0.521 0.485 964.0 0.503 0.506 0.510 0.513 0.517 0.458 0.463 0.466 0.469 0.473 0.411 0.477 0.422 0.425 0.429 0.371 0.403 0.415 0.419 0.368 0.385 0.375 0.378 0.357 0.381 0.330 0.336 0.318 0.324 0.333 0.322 0.327 0.269 0.277 0.267 0.264 0.271 0.274 0.198 0.205 0.208 0.210 0.213 0.211 0.035 0.144 0.149 0.153 0.145 0.146 0.148 0.137 0.142 0.151 •010 .075 •076 .078 .047 **.074** .077 .075 .080 .071 215 0 9

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CULUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

UNCONDITIONAL PROBABILITY = 002

198

STATION N OCT

DATA INPUT .153

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PROBABILITY THAT AT LEAST UNE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

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01						0.998									
6		629	426	982	766	0.997	866	966	666	666	666	000	000	000	000
ဆ	•					0.994									1.000
1	•	0.538	0.866	0.957	0.981	0.988	0.991	0.993	766.0	966.0	0.997	0.998	0.998	666.0	666.0
•	•	0.484	0.821	0.932	996.0	0.978	0.983	0.986	0.988	0.991	0.993	0.995	966.0	0.997	0.998
s	•	0.424	0.762	0.894	0.940	0.958	996.0	0.971	0.975	0.980	0.984	0.987	0.66.0	0.992	766.0
4	•	0.356	0.682	0.834	0.895	0.920	0.933	0.941	876.0	0.956	0.953	696.0	0.975	0.979	0.983
6	•	0.281	0.577	0.740	0.816	0.850	0.868	0.880	0.892	0.903	0.915	0.927	0.937	0.945	0.953
7		198	436	593	919	0.718	141	151	773	190	807	825	841	856	869
7	•	•104	.249	.362	.431	694.	164.	.507	.523	.541	.561	185.	.601	.620	.638
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CCLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

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PROBABILITY THAT AT LEAST
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0.475 0.591 0.673 0.733 0.817

STARTING DAY AFTER HEAVY RAIN

UNCONDITIONAL PROBABILITY =.619

COLUMN XX IS SINGLE SITE

200

STATION N NOV

DATA

INPUT

.013 .200 .233

STATION N DEC

INPUT DATA .026

900

.226

.548

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

>	ζ,		•	•	0.049	0.207	0.410	0.588	0.717	0.800	0.854	0.890	0.917	0.937	0.953
-	2 0	0.972	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
0		0.960	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
α	,	0.943	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
~	•	918	666		000		1.000								
•	•	0.883	0.997	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
c				1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
4	•						1.000								
m	•	0	•	•	0	0	0.999	1.	-	-	-	1.000	-	1.000	1.000
7	•	0.510	0.853	0.957	0.983	0.660	0.993	0.995	0.997	0.998	666.0	1.000	1.000	1.000	1.000
	•											.979			
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COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

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ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN 1.000 1.000 1.000 1.000 1.000 0.998 1.000 1.000 0.976 1.000 1.000 0.798 1.000 COLUMN HEADS ARE NUMBER OF SITES AVAILABLE ONE SITE BECOMES WEATHER WATCH IS INSTITUTED 1.000 0.999 1.000 1.000 1.000 0.959 1.000 1.000 1.000 1.000 0.994 1.000 0.999 1.000 1.000 1.000 1.000 1.000 1.000 1.000 0.986 0.930 0.997 1.000 1.000 0.999 1.000 1.000 1.000 1.000 1.000 LEAST 0.599 0.968 166.0 0.998 0.881 0.924 1.000 1.000 THAT AT 0.989 0.999 1.000 964.0 966.0 0.998 1.000 1.000 0.797 0.973 0.367 0.655 0.908 0.985 966.0 966.0 0.998 0.999 STATION P JAN 0.991 0.998 0.821 0.951 PROBABILITY READY AFTER DATA .779 .876 .924 .836 .904 .940 .413 969. 696. .577 .951 .961 INPUT .054 -483 .011 .452

STARTING DAY AFTER HEAVY RAIN UNCONDITIONAL PROBABILITY =.711 SINGLE SITE

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STATION P FEB
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INPUT DATA
          .014
                         .465
               .357
                    .107
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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

		m	4	5	\$	~		о т (01	×
0.386 0.519 0.	0.519 0	0.623	_	0.704	0.768	0.818		0.888	0.913	• •
0.820	0.820 0.	0.899		0.943	0.968	0.982		0.994	0.997	.0
0.833 0.932 0.	0.932 0.	0.972		0.989	0.995	0.998	•	1.000	1.000	•
0.902 0.969 0	0 696.0	0.990	_	0.997	0.999	1.000	-	1.000	1.000	0.022
0.933 0.983 0	0.983 0	0.99		0.999	1.000	1.000	-	1.000	1.000	0.083
0.949 0.989 0.	0.989 0	0.997		0.999	1.000	1.000	7	1.000	1.000	0.177
0.960 0.992 0.	0.992 0.	0.99	00	1.000	1.000	1.000	1.	1.000	1.000	0.285
0.968 0.994 0.	0.994 0.	6660	_	1.000	1.000	1.000	1.	1.000	1.000	0.390
0.975 0.996 0	0.996 0	0.99	0	1.000	1.000	1.000	-4	1.000	1.000	0.483
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0.986 0.998	0.998	1.00	0	1.000	1.000	1.000	۲.	1.000	1.000	0.625
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0.992 0.999	0.999	1.000	\sim	1.000	1.000	1.000	-	1.000	1.000	0.721
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COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION P MAR

DATA INPUT 060. .007

.194

191.

ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED PROBABILITY THAT AT LEAST

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.352 0.474 0.560 0.623 0.676 0.764 1.000 1.000 1.000 1.000 0.972 1.000 0.999 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 .000 1.000 1.000 1.000 1.000 1.000 0.998 1.000 .000 1.000 000-1 1.000 1.000 1.000 0.994 0.999 1.000 .000 000.1 000-1 1.000 1.000 1.000 1.000 0.999 0.999 0.999 1.000 1.000 0.997 0.832 0.987 000.1 • 000 000 000 0.760 0.995 966.0 0.997 966-0 0.999 0.968 0.991 666.0 0.999 0.996 666.0 000 1.000 0.657 0.972 0.982 0.985 0.988 0.992 166.0 0.939 0.908 0.949 0.973 0.991 0.993 0.961 0.981 0.987 .753 .803 .774 .577 .903 969. .835 .863 .886 .736 916. .930

HEAVY AFTER COLUMN XX IS SINGLE SITE STARTING DAY

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

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0	0	0.915	0.987	0.993	966.0	0.995	966.0	0.998	0.999	0.999	0.999	1.000	1.000	1.000	1.000
•	•	0.891								0.998					
00	•	0.860	0.968	0.981	0.984	0.986	0.989	0.992	0.995	966.0	0.997	0.998	0.999	0.999	666-0
7	•	0.821	0.951	0.969	0.973	0.976	0.981	0.986	0.600	0.992	0.994	966.0	0.997	0.998	0.998
9	•	0.771	0.925	0.949	0.954	0.959	996.0	0.974	0.980	0.985	0.988	0.991	0.993	0.994	966.0
S	•	0.708	0.884	0.916	0.924	0.930	0.940	0.952	196.0	0.969	0.975	0.979	0.983	0.986	686*0
4	•	0.626	0.822	0.862	0.873	0.880	0.895	0.911	0.926	0.938	0.947	0.955	0.962	0.968	0.973
8	•	0.522	0.726	0.774	0.787	0.797	0.815	0.838	0.858	0.876	0.890	0.903	0.914	0.924	0.933
7	•	0.389	0.578	0.629	0.643	0.654	0.675	0.702	0.728	0.751	0.771	0.789	0.805	0.821	0.835
-	•	.218	.350	.391	*405	-412	•430	.454	.479	. 501	.521	.540	.559	.577	.594
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CULUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION P MAY

INPUT DATA .416

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191-

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

RUW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

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01	•	0.231	0.485	0.593	0.635	0.651	0.659	0.665	0.670	0.676	0.682	0.688	0.694	0.700	0.706
0	•	0.211	0.450	0.555	0.596	0.612	0.620	0.626	0.631	0.637	0.643	0.650	0.656	0.662	0.668
80	•	0.189	0.412	0.513	0.553	0.569	0.577	0.583	0.588	0.594	0.600	909.0	0.612	0.619	0.625
1	•	0.168	0.372	194.0	0.506	0.522	0.529	0.535	0.540	0.546	0.551	0.558	0.564	0.570	0.576
9	•	0.146	0.329	0.417	0.453	0.468	0.476	0.481	0.486	0.491	0.497	0.503	0.509	0.515	0.520
S	•	0.123	0.283	0.362	0.396	0.409	0.416	0.421	0.426	0.431	0.436	0.441	144.0	0.452	0.458
4	•	0.100	0.233	0.302	0.331	0.344	0.350	0.354	0.358	0.363	0.368	0.372	0.377	0.382	0.387
6	•	0.076	0.181	0.237	0.261	0.271	0.276	0.279	0.283	0.287	0.291	0.295	0.299	0.303	0.307
8	•	0.051	0.124	0.165	0.182	0.100	0.194	961.0	0.199	0.202	0.205	0.208	0.211	0.214	0.217
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COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION P JUNE

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

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01	•	0.044	0.091	0.127	0.149	0.162	0.170	0.174	0.176	0.178	0.179	0.179	0.179	0.180	0.180
σ	•	ö	ö	0	•	ö	0	0	0.160	ö	ö	0	•	0.163	0.164
80	•	0	0	Ö	0	ö	•	•	941.0	•	0	•	ò	0.1	
7	•	0.031	0.065	0.000	0.107	0.117	0.122	0.125	0.127	0.128	0.129	0.129	0.129	0.130	0.130
•	•	0.027	0.056	0.078	0.092	0.101	0.106	0.108	0.110	0.111	0.111	0.112	0.112	0.112	0.112
5	•	0.022	0.047	0.065	0.078	0.085	0.089	0.091	0.093	0.093	0.094	0.094	0.094	0.094	0.095
4	•	0.018	0.038	0.053	0.063	0.068	0.072	0.074	2.075	0.075	0.076	9.016	0.076	0.076	0.076
M	•	0.013	0.028	0.000	0.047	0.052	0.054	0.056	0.057	0.057	0.057	0.057	0.058	0.058	0.058
7	•	0.009	0.019	0.027	0.032	0.035	0.037	0.038	0.038	0.038	0.039	0.039	0.039	0.039	0.039
-	•	•004	010.	.013	•010	.018	.018	•10.	•10.	•10.	610.	.020	•020	.020	.020
	-	7	٣	4	S	9	-	®	σ	10	1	12	13	14	15

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION P JULY

INPUT DATA

.574

.226

-097

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

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CULUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

UNCONDITIONAL PROBABILITY =.000

208

STATION P AUG

INPUT DATA

039

.226

065

PROBABILITY THAT AT LEAST ONE SITE BECOMES RFADY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.000 00000 00000 000.0 0.00 0.000 00000 000.0 00000 160.0 0.074 0.098 0.041 0.101 0.102 0.102 0.103 0.103 0.103 0.103 0.103 0.103 0.103 0.093 0.091 0.089 0.037 0.093 0.093 0.093 0.093 0.093 0.082 0.093 0.093 0.067 0.092 0.000 0.073 0.079 0.033 0.082 0.082 0.083 0.083 0.083 0.083 0.083 0.083 0.083 0.083 0.029 0.065 0.000 0.052 0.072 0.073 0.073 0.073 0.073 0.073 0.073 0.073 0.073 0.073 0.056 0.000 0.062 0.063 0.025 0.045 0.062 0.063 0.063 0.063 0.063 0.063 0.063 0.063 0.052 0.050 0.053 0.038 0.047 0.052 0.053 0.053 0.053 0.053 0.053 0.021 0.053 0.053 0.040 0.042 0.030 0.037 0.042 0.017 0.042 0.042 0.042 0.042 0.043 0.043 0.043 0.043 0.031 0.028 0.030 0.032 0.032 0.032 0.032 0.032 0.013 0.023 0.032 0.032 0.032 0.032 0.019 0.008 0.015 0.020 0.021 0.022 0.021 0.021 0.022 0.021 0.021 0.021 0.021 0.022 .011. •004 •000 .008 010. .011 .011 .011 .011 .011 110. .011 .011 110. 112 4 4 50 0 01 P 3 0

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION P SEPT

IMPUT DATA .430

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

RUW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

XX	0	•		•	00000	0.000	00000	0000-0	0.001	0.001	0.001	0.002	0.002	0.002	0.003
10		960.0	0.218	0.303	0.351	0.376	0.388	0.395	0.398	0.401	0.403	0.404	904.0	904.0	0.410
0	•	0.086	0.199	0.278	0.322	0.346	0.357	0.363	0.367	0.369	0.371	0.373	0.375	0.376	0.378
00	•	0.077	0.179	0.251	0.292	0.314	0.325	0.331	0.334	0.336	0.338	0.339	0.341	0.343	0.344
~	•	0.068	0.158	0.223	0.261	0.281	0.291	0.296	0.299	0.301	0.303	0.304	0.306	0.307	0.309
•	•	0.059	0.137	0.195	0.229	0.246	0.255	0.260	0.263	0.264	0.266	0.267	0.269	0.270	0.271
v	•	0.049	0.116	0.165	0.194	0.210	0.218	0.222	0.224	0.226	0.227	0.228	0.230	0.231	0.232
4	•	0.039	0.094	0.135	0.159	0.172	0.178	0.182	0.184	0.185	0.186	0.187	0.188	0.189	0.190
•	•	0.030	0.071	0.103	0.122	0.132	0.137	0-140	0.141	0.142	0.143	0-144	0.145	0.146	0.146
7	•	0.020	0.048	0.070	0.083	0.000	0.094	0.095	260.0	0.097	0.098	0.098	0.099	0.100	0.100
~	•	.010	.024	•035	-045	•040	.048	.049	.050	•050	.050	.051	.051	.051	•051
	-		3	*	2	9	7	30	0	01	=	12	13	14	15

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION P OCT

INPUT DATA .148

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.388 .161

.290

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

×			<u>م</u> ا	_	,002	110.	,029	056	980	,122	157	190	,221	152	.279
	o								0						_
01	•	0.585	0.893	0.972	0.990	0.995	0.997	0.998	0.999	0.999	0.999	0.999	1.000	1.000	1.000
6	:	3.546	3.866	096.0	3.985	3.992	3.995	966-0	0.997	966*(966.0	9660	666 -(666.	00001
6 0		505	832	246	975	986	166	993	0.995 (966	166	166	866	666	666
1		459	190	916	196	716	984	186	0.990	166	666	966	966	166	866
9		410	738	882	938	960	970	916	0.980	983	986	686	166	993	466
Ŋ		355	672	.832	106	932	146	955	196.0	196	972	916	980	.983	986
4	•	0.296	0.591	0.760	0.843	0.884	0.904	0.917	0.926	0.934	0.942	6.960	0.956	0.962	996.0
m	•	0.232	0.488	0.657	0.751	0.801	0.828	0.845	0.858	0.870	0.882	0.893	0.904	0.915	0.924
2	•	0.161	0.360	0.510	0.604	0.659	0.691	0.712	0.728	0.744	0.759	0.775	0.791	0.806	0.820
-	•	.084	.200	• 300	.371	.416	***	.463	•479	764.	• 509	.526	.543	. 560	.576
		7	m	3	S	9	~	œ	6	01	=	12	13	14	15

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION P NOV

INPUT DATA

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

XX			•	•	.002	.013	.036	.072	9110	.164	.213	.260	.304	.344	.382
10				0.984 0										000	-
6	ĸ	572	893	916	993	866	666	666	000	000	000		.000		.000
•	•	530	863	0.963 0.	986	966	866	866	666	666	000	1 0000	1 000	1 0000	• 000
7		483	824	0.944 0	980	166	566	166	866	866	666	666	666	000	• 000 1
•		432	775	0.916 0	596	982	686	266	766	966	166	866	866	666	1.999 1
S		376	711	0.873	938	596	116	983	186	686	992	666	366	966	166
4		314	630	0.808	892	931	950	196	896	416	816	982	986	986	166
M		246	979	0.710	812	998	895	913	928	935	943	156	958	965	970
7		172	392	0.562	672	738	111	803	822	838	852	867	880	893	904
-	•			.338											
	-	7	٣	4	S.	9	~	30	•	2	11	12	13	14	15

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

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INPUT	S	010	4	9	9

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

×		•	•	•	0.002	0.010	0.027	0.054	0.092	0.138	0.189	0.242	0.295	0.347	0.396
10	•	0.585	0.895	0.979	966.0	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
6	•	0.546	0.868	0.969	0.993	0.998	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
00	•	0.505	0.835	0.954	0.988	0.996	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
_	•	0.459	0.793	0.933	0.979	0.993	166.0	0.999	0.999	1.000	1.000	1.000	1.000	1.000	1.000
•	•	0.410	0.741	0.901	0.963	0.986	966.0	0.997	0.998	0.999	666.0	1.000	1.000	1.000	1.000
S	•	0.355	0.676	0.855	0.936	0.971	0.985	0.992	0.995	0.997	866.0	0.998	0.999	0.999	666.0
4	•	0.296	0.594	0.786	0.889	0.941	996.0	0.979	0.986	0.600	0.992	0.994	0.995	166.0	166.0
6	•	0.232	0.491	0.686	0.808	0.880	0.920	0.944	0.958	996.0	0.974	0.979	0.982	0.986	0.988
~	•	0.161	0.363	0.538	0.667	0.756	0.815	0.854	0.880	0.898	0.912	0.923	0.933	0.941	0.948
-	•	•084	.202	.320	.423	• 506	.570	.618	•653	.681	.704	.723	.740	.757	.772
		~	•	4	S	9	~	r	0	01	11	12	13	14	15

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION R JAN

INPUT DATA

054

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

×		•	•	•	0.013	0.049	0.111	0.192	0.285	0.362	0.475	0.561	0.636	0.701	0.756
10	0	0.855	0.990	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
6	•	0.824	0.984	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
60	•	0.787	0.974	0.997	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
~	•	0.741	0.959	0.995	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
•	•	0.686	0.935	0.989	0.998	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
S	•	0.619	0.898	0.976	0.995	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
*	•	0.538	0.839	676.0	0.984	0.995	0.998	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000
8	•	0.440	0.745	0.893	0.956	0.982	0.992	966.0	0.998	0.999	1.000	1.000	1.000		1.000
7	•	0.320	0.598	0.775	0.875	0.930	0.960	0.976	0.985	0.991	0.994	966.0	0.997	0.998	0.999
-	•						. 799								
	_	7	~	4	\$	•	~	ထ	6	01	11	12	13	14	15

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION R FEB

DATA INPUT 101.

.018

•625

.071

179

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED RUM HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

0.759 0.565 0.868 0.925 0.955 0.980 0.986 0.989 0.993 0.995 0.971 166.0 0.939 0.959 0.527 0.838 0.986 0.722 0.903 0.978 0.983 0.971 0.486 0.679 0.229 0.802 996.0 0.973 0.977 0.874 0.917 0.957 0.942 0.981 0.886 0.936 0.949 0.957 0.964 0.630 0.757 0.837 0.445 0.917 0.393 0.845 0.905 0.574 0.703 0.789 0.933 0.942 0.922 0.177 0.881 0.895 0.509 0.636 0.788 0.860 0.880 906.0 0.150 0.341 0.915 0.922 0.928 0.727 0.831 0.555 0.283 0.434 0.646 0.122 0.758 0.817 0.835 0.850 0.870 0.879 0.711 0.792 0.861 0.455 909-0 0.093 0.347 0.720 0.742 0.758 0.221 0.541 0.655 0.692 0.772 0.794 0.153 0.333 0.640 0.463 0.544 0.612 0.063 0.248 0.405 0.572 0.594 0.627 0.508 0.652 .133 .363 .400 .032 .267 .228 .299 .325 .377 .080 .183 .346 .389 .410 13 9 12

0.003 900.0

0.001

0.037

0.018 0.026

0.011

CULUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION R MAR

DATA INPUT

.115 *10*

.452 .032 .387

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

XX					600	032	068	113	163	213	261	306	348	387	423
	C	0	0	0	0	o	0	0	0	0	0	0	0	•	•
10	0	0.803	0.971	0.995	0.999	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
3*	•	0.768	0.959	0.991	0.997	0.999	0.999	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
00	•	0.727	0.941	0.985	0.995	0.998	0.999	0.999	0.999	1.000	1.000	1.000	1.000	1.000	1.000
7		619	916	975	066	966	166	866	966.0	666	666	666	000	000	1.000
9	•	0.622	0.880	0.957	0.981	0.989	0.993	0.995	966.0	0.997	0.998	0.999	0.999	666.0	666.0
S	•	0.556	0.830	0.928	0.963	0.977	0.983	0.987	0.990	0.992	0.994	966.0	0.997	966.0	0.998
4	0.	0.477	0.757	0.877	0.928	0.950	0.962	0.970	0.975	0.980	0.984	0.987	0.600	0.992	966.0
m	•	0.385	0.654	0.793	0.861	0.895	0.914	0.927	0.937	946.0	0.954	0.961	0.968	0.973	0.977
7	•	0.277	0.507	0.650	0.731	0.777	0.806	0.826	0.842	0.857	0.872	0.886	0.898	0.910	0.920
-	•	.150	.298	.408	.482	.528	.559	-582	• 603	.622	.642	.662	.681	. 700	.717
	_	7	m	*	S	9	~	Œ	•	01	11	12	13	14	15

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION R APR

INPUT DATA

.238

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

RUM HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

×	•	•	•		*00*	.014	.028	*044	-062	.080	160.	1114	.131	141	0.163
10															0.995 0
6		653	870	934	957	996	971	975	979	982	984	0.987 0	989	166	266
œ		609	837	116	939	156	956	963	196	116	975	0.979	982	984	986
1												0.965			
9		506	743	837	877	968	406	516	923	930	937	0.944	950	958	096
8		777	819	780	825	848	861	872	882	168	106	0.909	116	928	932
4		375	965	702	752	178	194	807	619	831	842	0.854	864	874	883
m		297	493	265	649	219	769	601	722	736	750	0.763	176	788	800
7												0.617			
-	•											.381			
	_	7	C	4	\$	•	7	ىت	0	10	11	12	13	14	15

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION R MAY

INPUT DATA .385

615. .034

.032

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

00000 0.000 0.002 0.001 0.000 0.002 0.003 0.001 0.001 0.002 0.437 0.154 0.282 0.363 0.410 0.452 0.466 0.410 0.473 0.475 0.477 0.482 0.461 01 0.258 0.334 0.404 0.440 0.378 0.418 0.435 0.438 0.445 0.427 0.432 0.303 0.344 0.368 0.382 0.390 0.395 0.398 0.403 0.405 0.126 0.233 0.401 0.407 0.309 0.359 0.365 0.344 0.356 0.363 0.207 0.271 0.331 0.361 0.111 0.351 0.367 0.237 0.303 0.319 0.321 0.180 0.310 960-0 0.314 0.323 0.292 0.317 0.271 0.153 0.260 0.232 0.270 0.274 0.080 0.202 0.250 0.266 0.272 0.276 0.280 0.277 0.190 0.205 0.222 0.224 0.229 0.065 0.124 0.165 0.214 0.219 0.225 0.227 0.230 0.146 0.049 0.165 0.175 0.095 0.169 0.172 0.173 0.176 0.127 0.158 0.177 0.178 0.086 0.100 0.113 0.120 0.033 0.064 0.109 0.116 0.118 0.119 0.122 0.123 0.121 0.122 .058 .060 .056 .061 -062 .063 .063 4457 .062 .062 .017 .033 10 12 11

CULUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIM

STATION R JUNE

INPUT DATA

.533

.096

PROBABILITY THAT AT LEAST ONE SITE BECOMES RFADY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

×		•	•	•	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0 1	•	0.044	0.077	960.0	0.105	0.110		_	0.113	_	_	0.114	911.0	-	911.0
0			010	180	0.095	0.099	101		103		103	0.103	103		0.103
90	•	0.035	0.062	0.077	0.085	0.089	0.091	0.091	0.092	0.092	0.092	0.092	0.092	0.092	0.092
1		-	055	890	075	920	080	_	180	081	180	0.081	.081	.081	
٠		027	140	650	990	190	690	690	070	070	070	0.070	0.070	0.070	0.070
9			660	640		950	058	058		650		650	650	059	
4		810	032	039	740	045	940	140	140	140	140	140.0	140	140	0.047
6												0.036			
2	•		910	020	022	023	023	920	024	970	024	0.024	024	024	
-	•	•004	•008	•010	110.	•015	.012	-015	•015	.012	.012	.012	.012	.012	.012
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COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIM

STATION R JULY

INPUT DATA

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-065

PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

RUM HEADS ARE DAYS SINCE WEATHER WATCH BEGAN CULUMN HEADS ARE NUMBER OF SITES AVAILABLE

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1	×	•		•		ċ	0	0	0	0	0	0	ö	·	0	0.000
1	10		0.041	0.086	0.111	0.123	0.128	0.129	0.130	0.131	0.131	0.131	0.131	0.131	0.131	0.132
1 2 3 4 5 6 7 . 0 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.	6	•	0.037	0.077	101	111	116	117	118	118	118	119	119	119	119	
1 2 3 4 5 6 7 . 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0.	80	•	0.033	0.069	0.000	0.100	0.103	0.105	901.0	0.106	0.106	0.106	901.0	0.106	0.107	0.107
1 2 3 4 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	7															760.0
1	•		025	052	890	910	610	080	080	081	180	081	081	081	180	_
1 2 3 4 .0 0. 0. 0. .004 0.008 0.013 0.017 .009 0.018 0.027 0.035 .012 0.023 0.035 0.046 .013 0.026 0.039 0.051 .014 0.027 0.041 0.054 .014 0.028 0.041 0.055 .014 0.028 0.041 0.055	S		021	940	150	063	990	190	190	890	890	890	990	890	890	0.068
1 2 3 .004 0.008 0.013 .009 0.018 0.027 .012 0.023 0.039 .014 0.027 0.040 .014 0.028 0.041 .014 0.028 0.041 .014 0.028 0.041 .014 0.028 0.041 .014 0.028 0.041 .014 0.028 0.041 .014 0.028 0.041	4															
0004 0.008 .009 0.018 .012 0.023 .014 0.027 .014 0.027 .014 0.028 .014 0.028 .014 0.028 .014 0.028	6		013	027	035	039	040	140	041	041	041	041	041	041	140	041
100000000000000000000000000000000000000	7		900	910						028	028	028				
10m420r802um42	-	•	• 004	600	.012	.013	•014	·014	•10•	•014	_	_	-014	•014	•014	•10•
		~	7	~	4	S	9	~	30	0	10	11	12	13	14	15

CULUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

SECRET

STATION R AUG

INPUT DATA

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

RCW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

×				•	00000	000.0	00000	000 *0	00000	00000	00000	0000	00000	0000	000.0
01	1	0.041	084	105	115		119	120	0.120	120	120	120	121	121	121
6		150	075	0.095	0.104	0.107	108	108	601	109	109	601	601	109	109
30	ő	0.033	0.067	0.085	0.093	960.0	0.097	0.097	0.097	0.097	0.097	0.098	0.098	0.098	0.098
~				0.075											
۰	•	0.025	0.051	0.065	0.010	0.073	0.073	0.074	0.074	0.074	0.074	0.074	0.074	0.074	0.074
Ŋ	•	0.021	0.043	0.054	0.059	0.061	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062	0.062
*	•	0.017	0.034	0.044	0.048	0.049	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050	0.050
. m	•	6.013	0.026	0.033	0.036	0.037	0.037	0.038	0.038	0.038	0.038	0.038	0.038	0.038	0.038
8	•	0.008	0.017	0.022	0.024	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025	0.025
-	•	•004	•000	.011	.012	-012	.013	.013	.013	.013	.013	.013	•013	.013	.013
		~	*	4	S	9	1	&	3	10	=	12	13	14	15

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION R SEPT

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1hPUT CATA -303 -030 -434 -100 PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

X					000	000	.001	100	-005	.003	• 004	900.	.007	6000	.010
	C														
01	0.0	0.163	0.343	0.474	0.557	0.608	0.638	0.656	0.668	0.675	0.681	0.686	0.691	0.695	0.700
0	•	0.148	0.315	0.439	0.520	0.569	0.599	0.617	0.629	0.637	0.643	0.648	0.652	0.657	0.661
90	•	0.133	0.285	0.402	0.479	0.527	0.556	0.574	0.586	0.594	0.599	0.604	609.0	0.613	0.618
~			255	362	435	084	605	526	538	545	551	556	999	595	695
9	•	0.102	0.223	0.320	0.387	0.429	0.456	0.473	0.484	0.491	164.0	0.501	0.506	0.510	0.514
S			189	275	334	374	398	414	454	430	436	440	444	448	755
4	•	0.069	0.155	0.226	0.278	0.312	0.334	0.348	0.356	0.362	0.367	0.371	0.375	0.378	0.382
6	•	0.052	0.118	0.175	0.217	0.245	0.263	0.274	0.281	0.287	0.290	0.294	0.297	0.300	0.303
7	•	0.035	0.081	0.121	0.150	0.171	0.184	0.192	0.198	0.202	0.204	0.207	0.209	0.211	0.214
-	•	.018	.041	-062	.078	.089	260.	101.	104	106	.108	109	.111	1112	.113
		2	~	4	S	•	_	&	У	1 C	=	12	~	14	1,

CULUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

STATION R DCT

1NPUT DATA -153 -008 -484 PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

×	•	•	•	•	0.001	0.003	600.0	0.019	0.032	0.048	0.066	980.0	0.105	0.124	0.143
01	•0	0.408	0.738	0.891	0.950	0.973	0.983	0.988	0.991	0.993	0.994	0.995	966.0	966.0	166.0
6	•0	0.376	0.701	0.863	0.933	0.962	0.975	0.982	0.985	0.988	J.990	0.991	0.993	0.994	0.995
80	•	0.343	0.658	0.830	0.909	0.945	0.962	0.971	0.977	0.980	0.983	0.985	0.987	0.989	166.0
7									0.963						
٥	••	0.270	0.552	0.735	0.834	G.886	0.914	0.930	0.940	0.947	0.953	0.958	0.962	0.966	0.970
ď	•	0.231	0.488	0.669	0.776	0.837	0.871	0.891	0.904	916.0	0.921	0.928	0.934	0.940	0.946
4		189	415	587	869	165	806	831	0.847	859	869	818	887	895	903
ĸ	•	0.146	0.331	0.485	0.593	0.663	0.707	0.736	0.756	0.770	0.783	0.794	0.805	0.816	0.827
7	•	0.100	0.235	0.358	0.451	0.516	0.559	0.588	0.609	0.625	0.638	0.651	0.664	0.676	0.689
~	•	.051	.125	.198	• 528	. 304			.375						
		2	~	4	37	ð	_	©	6	1 0	11	12	13	14	15

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN



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PHOBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

×		000	0003	0.012	0.030	0.056
01	246	759 875 933	961	983	990	0.993 0.994 0.995
•	225 510	722 846 912	996	974	984	0.989 (0.990 (0.992 (
8	203	680 810 884	958	961	979	0.981 0.984 0.986
2	180	631 767 849	925	942	960	0.969 (0.973 (0.976 (
٠	156	574 713 802	857	913	937	0.950 0.954 0.959
						0.917 0.924 0.929
4	107	434 565 560	726 772	85 80	841854	0.864 0.872 0.880
m 1	212	347 464 555	622 670	705	749	0.776 0.786 0.796
~	147		525	557 582	602 618	631 643 654
·		.133 .188 .236	.309	.334	.369	
	26.	4 10 0	~ 20 ·	6 ၁	11	13

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN

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PROBABILITY THAT AT LEAST ONE SITE BECOMES READY AFTER WEATHER WATCH IS INSTITUTED

ROW HEADS ARE DAYS SINCE WEATHER WATCH BEGAN COLUMN HEADS ARE NUMBER OF SITES AVAILABLE

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10	0	0.154	0.395	0.618	0.776	0.873	0.927	0.957	0.973	0.983	0.988	0.491	0.993	0.995	966.0
6		140	364	0.580	140	844	905	146	962	416	186	986	686	166	993
30	•	0.126	0.331	0.537	0.698	0.808	0.877	616.0	0.945	0.961	0.971	0.978	0.982	0.985	0.987
7	•	0.111	0.297	064.0	0.650	0.764	0.840	0.890	0.921	0.941	0.955	996.0	0.970	0.975	0.978
9	•	960.0	0.261	0.439	0.593	0.710	0.792	0.849	0.887	0.912	0.930	0.942	0.951	0.957	0.962
S	•	0.080	0.222	0.382	0.527	0.643	0.730	0.793	0.837	0.868	0.891	0.907	0.919	0.928	0.935
4	•	0.065	0.182	0.320	0.451	0.562	0.649	0.716	0.766	0.802	0.830	0.850	0.866	0.878	0.888
m	•	0.049	0.140	0.251	0.362	0.461	0.544	0.611	0.663	0.704	0.735	0.759	0.778	0.793	0.806
2	•	0.033	960.0	0.175	0.259	0.338	0.408	194.0	0.516	0.555	0.587	0.613	0.633	0.651	0.665
-	•	-017	640.	.092	.139	.186	.231	.270	.304	.333	.358	.378	.395	604	.421
	-	~	~	3	ĸ	•	~	æ	0	10	11	12	13	14	51

COLUMN XX IS SINGLE SITE STARTING DAY AFTER HEAVY RAIN